

THE JOURNAL OF
MEDICAL
EDUCATION

JULY 1953 • Vol. 28, No. 7

Table of Contents on Page 2

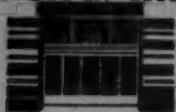


SPECIAL PUBLICATION OF THE ASSOCIATION OF AMERICAN MEDICAL COLLEGES

New (4th) Edition!

Noyes—Modern Clinical Psychiatry

See SAUNDERS ADVERTISEMENT—just inside



1st SURVEY volume
—ready this month

Medical Schools in the United States at Mid-Century

By John E. Deitrick, M.D., and Robert C. Berson, M.D. To be published this month. 390 pages, 6 x 9. Probable price: \$4.50

This comprehensive volume is the formal report of the Survey of Medical Education, organized in 1947 and participated in by leading medical educators throughout the United States. Basing its analyses and conclusions upon facts and opinions obtained from representative deans, faculties, and medical students, this study comprises a current and authoritative self-evaluation of medical education. In effect, medical educators themselves have thoroughly investigated their own leadership, functions, activities, and finances. This book will be a unique and essential aid to teachers and students alike who wish an objective study of today's medical school.

Preparation for Medical Education in the Liberal Arts College

By Aura Edward Severinghaus, Harry J. Carman, and William E. Cadbury, Jr. In preparation for late fall publication.

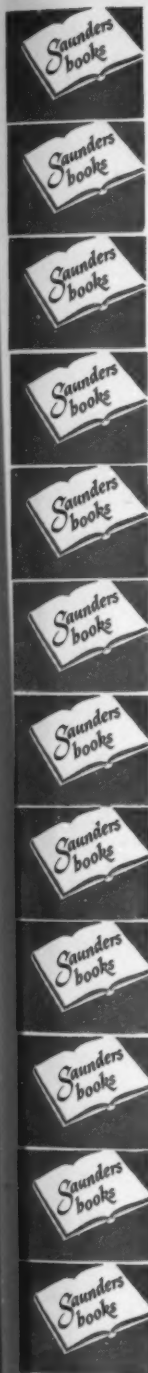
This work carefully examines the educational opportunities available to a student *before* he enters medical school. The book is the product of more than two years of extensive research in which more than one hundred Liberal Arts Colleges have collaborated. Although independently conducted by a subcommittee on Preprofessional Education of the Survey of Medical Education, this survey has been correlated with the work of the parent committee to present a complete picture of the range of preprofessional and medical education.

McGraw-Hill Book Company, Inc.

HEALTH EDUCATION DEPARTMENT

330 West 42nd Street

New York 36, N. Y.



New (4th) Edition!

Noyes—Modern Clinical Psychiatry

Greatly improved for its *New (4th) Edition*, this valuable text contains factual, concise information on the latest developments and theories in psychiatry. It gives the student a complete picture of all fields of psychiatry and is detailed in discussions regarding methods of treatment.

There are excellent sections on techniques of psychotherapy and psychoanalysis; different methods used in group therapy; latest surgical techniques (topectomy and thalamotomy); use and value of Antabuse in alcoholism, etc.

By ARTHUR P. NOYES, M.D., Superintendent, Norristown State Hospital, Norristown, Pa. 624 pages, 6" x 9". *New (4th) Edition! Ready in September.*

New (12th) Edition!

Todd, Sanford and Wells—Clinical Diagnosis by Laboratory Methods

Medical students concerned with clinical laboratory pathology will find this time-tested book particularly useful. It gives detailed, step-by-step technic for all standard tests, plus clinical interpretation of the findings. For this edition, chapters on The Blood, Clinical Chemistry and Bacteriologic Methods have been revised. The section on Serology is the most complete and up-to-date reference of its kind.

By the late JAMES CAMPBELL TODD, Ph.B., M. D.; ARTHUR HAWLEY SANFORD, A.M., M.D., Emeritus Professor of Clinical Pathology, The Mayo Foundation, University of Minnesota; and BENJAMIN B. WELLS, M.D., Ph.D., Professor of Medicine, Department of Medicine, School of Medicine, University of Arkansas. 998 pages, 6" x 9", 946 illustrations—197 in color—on 403 figures. \$8.50. *New (12th) Edition!*

A New Book!

Braun—Bacterial Genetics

The development of strains of microorganisms resistant to action of new chemotherapeutic drugs, has aroused interest in an expanding field—*genetics of bacteria*. This much-needed text gives the student information on every advance in the field. It also provides a basis for better evaluation of the relationship between bacterial genetics and pathogenesis, general laboratory technique, bacterial physiology, epidemiology, therapy and taxonomy.

By WERNER BRAUN, Ph.D. About 244 pages, 6" x 9", illustrated. *New! Ready in August.*

W. B. SAUNDERS COMPANY
West Washington Square Philadelphia 5

Table of Contents

Vol. 28

July 1953

No. 7

ARTICLES

Symposium on Extramural Facilities in Medical Education

—James M. Faulkner, special editor.....	9
Introduction—David P. Barr.....	9
General Practitioner Supervision—Henry Packer....	12
Prolonged Illness—Martin Cherkasky.....	15
Integration of Psychiatry—George H. Carter, Bernard Bandler, Henry J. Bakst.....	21
Observation of the Family in the Home— John P. Hubbard.....	26
Disease Prevention and Health Service—Kinloch Nelson, Edward Holmes.....	30
Comprehensive Medical Care—George G. Reader.....	34
Medical Care—Henry J. Bakst.....	40
Student Participation and Supervision—Cecil G. Sheps, William L. Fleming.....	44
Appendix.....	48

EDITORIALS AND COMMENTS

Home Care Programs.....	54
Full-Time Clinical Teachers.....	54

NEWS DIGEST.....	56
College Briefs.....	60

AUDIOVISUAL NEWS.....	67
-----------------------	----

BOOK REVIEWS.....	71
-------------------	----

THE PERSONNEL EXCHANGE.....	74
-----------------------------	----

Association Officers, Staff, Committees.....	4
Index to Advertisers.....	76

The Journal of MEDICAL EDUCATION



Official publication of the Association of American Medical Colleges, 185 N. Wabash Ave., Chicago 1.

The Journal of MEDICAL EDUCATION is owned and published monthly by the Association of American Medical Colleges, 185 N. Wabash Ave., Chicago 1; Phone, STate 2-0870. Entered as second class matter January 17, 1930, at the Post Office, Chicago, Ill., under the Act of March 3, 1879.

EDITORIAL BOARD: Lowell T. Coggeshall, Chicago; William B. Bean, Iowa; James Faulkner, Boston; Chauncey D. Leake, Texas; Robert A. Moore, Washington (St. Louis). **STAFF:** Editor, Dean F. Smiley; Managing Editor, William Swenberg; Assistant Managing Editor, Tess Snyder; News Editor, Jeanette Ninas.

EDITORIAL POLICY: Neither the editors nor the Association assumes responsibility for statements made by individual writers. With the author's permission the right is reserved to reduce or revise any material submitted for publication.

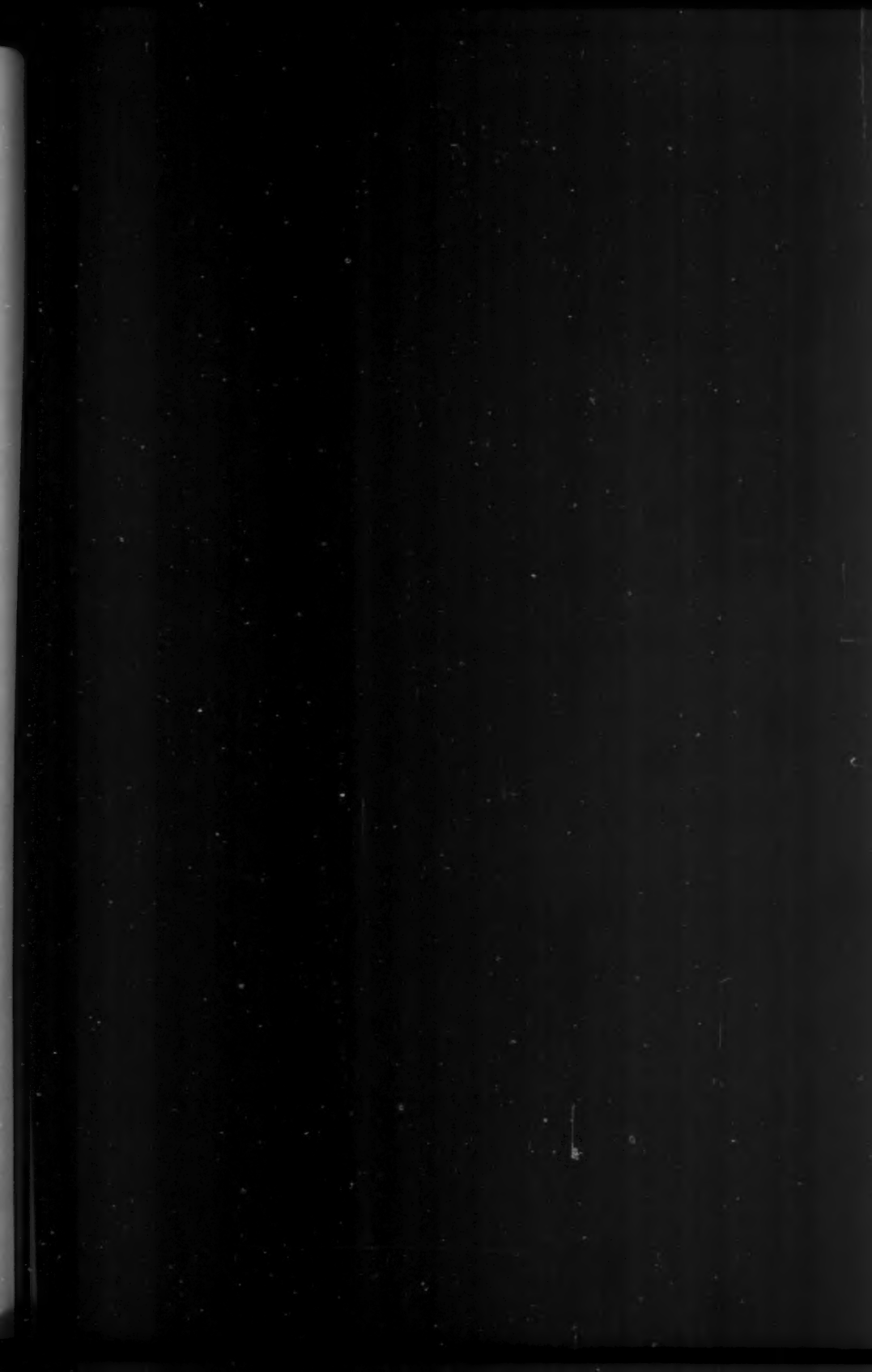
SUBSCRIPTION RATES: \$7 per year; \$1 per single copy; foreign \$8 per year; \$1.25 per single copy.

COPY DEADLINE: Copy for typesetting must be in by the 1st and plates by the 10th of the month preceding publication.

NATIONAL ADVERTISING REPRESENTATIVE: Gordon M. Marshall, 30 W. Washington St., Chicago 2, Ill.; phone, DEarborn 2-5148.

COPYRIGHT: July 1953, by the Association of American Medical Colleges.

Printed in U.S.A.



Extramural Facilities in Medical Education

THE ARTICLE SECTION of this issue of MEDICAL EDUCATION is devoted to a symposium on Extramural Facilities in Medical Education. Contributing authors are leaders in a movement to carry medical teaching into the home. Their reports deal exclusively with organized home care or family study programs and do not consider preceptorships which may share some of the same educational objectives. In view of the relatively recent development of most of these activities, an appendix is included which outlines the organizational framework of 11 programs now in operation.—JAMES M. FAULKNER, dean, Boston University School of Medicine; special symposium editor.

Introduction

THIS SYMPOSIUM is indicative of widespread and increasing interest in the contribution that student participation in extramural activities can offer in medical education. It is chiefly concerned with problems of medical care and practice that are not included in courses of anatomy, physiology, pharmacology or bacteriology; that receive less than optimal attention in the wards of teaching hospitals; that are considered inadequately in the daily

Dr. Barr is professor of medicine, Cornell University Medical College, and physician-in-chief, New York Hospital.

DAVID P. BARR

exercises of most outpatient departments.

It deals with the life situation of patients outside the hospital, and how this may modify manifestations and prognosis of disease as well as behavior and attitude to illness. It stresses the importance of convalescence, rehabilitation, the preservation of health and the prevention of subsequent illness. It considers arrangements which may ameliorate the consequences to individuals and their families of permanent disabili-

ties, serious mental disturbances, prolonged illness and senility.

It explores the possibilities of making medical care more comprehensive by integrating curative and preventive measures, by considering both physical and emotional factors and by exploring sociological as well as medical aspects of disease. It describes several carefully planned attempts to offer to the student more complete examples of medical care in which he can be an active participant.

Perusal of the separate contributions to the symposium serves to illustrate both the complexity of the problem and the variety of ways by which it may be approached. Although programs for home care have been especially emphasized, it is apparent that the use of extramural facilities encompasses many activities that can be undertaken without actual visits to the home. These include interviews with members of the patient's family, conferences with social workers and visiting nurses and contacts with community agencies that can offer general or specific services. Pervading the entire discussion is the realization that the complicated problems of many patients cannot be undertaken or solved by any one person.

If the objectives of comprehensive care are to be achieved, their intricacies must often be shared by a team of several individuals with different training and duties. Regardless of the complexities of the situation, however, the mobilization and organization of the various individuals, agencies and facilities are functions of the physician and therefore essential components of the education of medical students to whom clinical responsibilities are assigned.

Educational experience of the kind discussed in the symposium should represent, for the large number of students who will become general practitioners, an admirable preview of their later daily encounters with clinical problems in which the threads of medical and sociological factors are closely knit. [By many who advocate the use of extramural activities, however, the programs are not regarded primarily as training for general practice. They are considered as necessary conditioning for every medical graduate who later as surgeon, internist or specialist must assume at one time or another the traditional role of family advisor and must accept responsibility for continuing and comprehensive care.

General Principles

In these introductory remarks, it is unnecessary to anticipate details of what will follow. It may not be inappropriate, however, to comment on a few of the general principles which appear to underline some, if not all, the various plans and to indicate tentatively certain arrangements that seem necessary for effective instruction.

1. Although information obtained from the use of extramural facilities often provides important clues in the management of patients, it constitutes only a part, and often a small part, of the total which is necessary for establishing valid diagnosis, prognosis and treatment. If divorced in time and place from other aspects of medical care, it loses much of its impact and significance. Wherever possible the study of home care and environmental influence should be an integral part of the student's work in outpatient departments and wards of the teaching hospital.

2. If home care programs are to have optimal influence on the future thought and habits of the medical student, they must be of a quality not always exemplified in present practice. Inadequate improvisations and unjustifiable shortcuts may leave impressions so unfavorable that the whole experience becomes undesirable. The aim should be not to imitate what doctors do today, but what they might do if they could offer in the home all the resources of medical and social science. For the attainment of such a goal, careful and competent supervision and the mobilization of all available resources of clinic and community are essential.

3. The purpose of emphasizing home care and other extramural activities is to afford a broader view and a deeper understanding of the problems of sick people. It is probably true that for many years medical education has been focused strictly upon the applications of medical science to a degree that has led to relative neglect of other very important aspects of practice. This emphasis has resulted, however, in unprecedented medical progress. There is no indication that continued attention to medical science will be less rewarding in the future. Consequently, enthusiasm for home care and the sociological aspects of disease must be directed chiefly to integration and correlation of these aspects with existing teaching. It should never lead to displacement or stultification of meritorious practice and instruction in the application of medical science to clinical problems.

4. Discrimination must be exercised in the use of extramural facilities in medical education. While every patient has a home, a family and a life situation, detailed study of these factors is more relevant in

some cases than in others. An analogy may be found in the use of x-ray examinations. Although every patient has a stomach, intestines and kidneys, fluoroscopic examinations of the gastrointestinal tract and pyelograms are offered only when special need is demonstrated. Awareness of extramural facilities and the ability to mobilize them when needed are of crucial importance. Their routine use in the care of every patient is neither feasible nor desirable.

5. Programs for home care will have their maximum impact for the student under circumstances where indications for strictly medical attention are most compelling. The student should enter the home as a physician and because of medical needs in the cure or prevention of illness. In his contacts with the home he will inevitably encounter many conditions that are more social than medical, and yet may often be related quite obviously to the pathogenesis, aggravation and continuance of disease. These will have a high educational value for him. Interest in them, however, should not divert him from his primary role as a physician. Eventually there must be evolved a more precise definition than now exists of the limits of the responsibility of the physician. Poverty, poor housing, unemployment and religious conflicts can seldom be remedied by the practitioner of medicine. The emotional involvement of the student in the home should not lead him to pre-empt the function of the priest, social worker, visiting nurse or social reformer.

6. The most crucial requirement for success in a program for the utilization of extramural facilities is a group of influential clinical teachers who by previous personal experience, conviction and current participation

have become acutely aware of the importance of the program. It is unlikely that many students will attain active interest in a project which does not occupy and stimulate their instructors. Those who have contributed to this symposium are among the leaders in the field and in a sense are pioneers in an endeavor that is as old as medicine, but which requires revision and re-emphasis if it is to be correlated with modern medical teaching.

7. One other essential for successful instruction must be mentioned. It is among the most important. The student must have continuity of contact with the patient. In most of our outpatient departments at present, the effort to present a wide range of subjects has resulted in deplorably short assignments to each clinical department and station. Students may be fortunate if they see the same patient on more than two occasions. Obviously this time allowance is barely sufficient for acquaintance with the immediate medical problem. It affords no opportunity for adequate exploration of extramural facilities that might be mobilized for better after-care and prognosis. Rearrangements of existing curricula are nec-

essary for effective instruction in these aspects of practice.

In reviewing the contributions of the symposium, the most impressive aspect is that so many able and earnest teachers in so many schools are cognizant of the need of utilizing extramural facilities in medical education and are taking steps to study how these activities may be most successfully integrated with existing curricula. Since some of the programs have been in operation for several years, preliminary estimates of effectiveness can already be made. Others have only begun and must be considered as aspirations and hopes. All of them must still be regarded as tentative and experimental.

No one can say at present how many of the activities can be included in a four-year curriculum without distortion of other important aspects of medical education. No one is as yet in possession of the perfect plan. It is only by actual trial that feasibility and most desirable content can be ascertained. It is highly probable, however, that most, if not all of these carefully considered programs will eventually contribute to the better preparation of the physicians of the future.

General Practitioner Supervision

HENRY PACKER

ONE OF THE aspects of the program established at the University of Tennessee College of Medicine represents an effort to provide medical students with an experience in extramural medical services in the absence of a pre-existing domiciliary medical care program.

Dr. Packer is professor of preventive medicine, University of Tennessee College of Medicine.

Lacking facilities upon which to construct a type of program emphasizing home care, it was decided to develop a limited program solely for teaching purposes. This would provide students with home care experience and include the elements of continuing responsibility for comprehensive health care through a family care program, and of preceptorship

carried out under general practitioners.

The latter feature of the program, consisting of both extramural and intramural phases, was initiated through the establishment of a family general practice clinic in the outpatient department of the teaching hospital. An underlying purpose of the total program was to give students experience in the various aspects of the "family doctor" type of practice; to balance the emphasis upon specialty practice which characterizes existing undergraduate training.

The general practice phase of the program was developed on the premise that a medical school should give students actual experience in the various forms of medical practice in which they are likely to engage upon completion of their training. General practice is the most common form of practice in this country.¹ The demand for general practitioners, especially in smaller communities and rural areas, continues to remain unsatisfied. Lack of emphasis on, or provision for actual experience in this form of practice in undergraduate medical education has probably contributed to this situation.

Even when a medical school has a sincere desire to remedy this situation, a difficult problem arises when it endeavors to provide students with an experience in general practice as it might be carried out by a general practitioner in a small community. The structure of medical education and of medical services in a teaching hospital is highly departmentalized, with specialization developed to a high degree. This structure bears little resemblance to the conditions of general practice which might be desirable to simulate for the benefit of the student. Furthermore, to an in-

creasing degree, the faculties of present-day medical schools have had no personal experience with general practice, but have embarked upon specialty training immediately upon leaving medical school.

Many medical schools, desirous of promoting an interest in general practice and of providing students with actual first-hand experience in this field, have made arrangements for preceptorships under general practitioners in outlying communities. At present 25 medical schools have such plans whereby the student spends a variable period of time in a relationship comparable to the apprenticeship of earlier days.

At the University of Tennessee, we were interested in bringing our medical students in contact with general practitioners and with the conditions of general practice in the hope that they would gain a favorable impression of this form of practice. Almost two-thirds of the population of the state reside in communities of less than 2,500, and it is our belief that the general practitioner will continue to be the key person in providing medical care for this large segment of the population. Approximately two-thirds of our medical students indicate that they plan to go into general practice. A degree of obligation, therefore, is felt to provide students with some type of experience in this field.

For these reasons, and also with a desire to relate such an experience to other aspects of the teaching program, it was decided to establish a family general practice clinic within the teaching center, and to bring general practitioners into this clinic in a teaching capacity rather than send the student to the general practitioner. The clinic was established in the outpatient department of the

Symposium on Extramural Facilities

John Gaston Hospital in September 1951. It was designated as a family general practice clinic in the hope that as much emphasis ultimately would be given to services to the family as a unit as to providing a demonstration of the scope of services which could be provided by a competent general practitioner.

The division of preventive medicine was given responsibility for the administrative aspects of this program, and the general practitioners who constitute the clinic staff have faculty appointments in this division. The general practice program has a full-time director and assistant director, both of whom have a background of experience in general practice. It is, therefore, not only a general practice clinic, but in every sense is a general practitioner's clinic. It was felt that only by setting up the staff in this manner would the clinic have the desired atmosphere of a general practitioner's office.

Students are assigned to the clinic during the last two quarters of the curriculum. By this time they have been through practically all of the specialty clinics of the outpatient department. It is made clear when they first enter the clinic that its purpose is not to teach them the basic principles of medicine or techniques which are different from those they have learned in the specialty departments. The purpose, rather, is to give them an opportunity to apply what they have learned elsewhere under the conditions of general, rather than specialty practice. Students are encouraged to try to meet the total needs of patients in this clinic, with a minimum of referral to specialty clinics and for costly laboratory studies.

It soon became apparent that the family general practice clinic, carried

on as an intramural activity, fell short of being representative of the spectrum of services provided by a general practitioner in his everyday practice. To achieve this obviously required more than a demonstration of services to ambulatory patients. Need was felt for the addition of home care services, as well as for inclusion of such other elements of comprehensive care as health maintenance services to well individuals.

In the absence of a domiciliary medical care program upon which such services might be based, it was decided to establish a family care program, one of the components of which would be home care, with the family general practice clinic serving as a base of operations, comparable to the office of a practicing physician.

Under the Tennessee four-quarter plan, students receive instruction continuously for four quarters each year, except for a review quarter which interrupts this sequence at the completion of the sixth quarter. There are 12 quarters in all. Orientation of the student toward his role in the family care program is given first during the seventh quarter of the course in preventive medicine, since that department has administrative responsibility for the program. The objectives of the program are explained at this time, and the student is furnished with printed instructions to guide him in his participation in the program, which continues until he graduates. It is during this seventh quarter that he is informed regarding available community services which he may call upon for his family.

During the eighth quarter, the student selects the family for which he will provide care from among patients seen in the outpatient medi-

cine clinic. Students are urged to select families containing young children, so that their experience will be a broad one, and many select families in which three generations live in the same household, thus providing an opportunity to become familiar with geriatrics as well as pediatrics.

The student is provided with a folder, in which he keeps a record of all services to his family. Printed forms are provided for recording the results of periodic examinations upon children and adults, immunizations, home and clinic visits, etc. This folder is submitted for periodic review, and also is referred to when students report upon their families at the family care conferences, which are held during the tenth quarter. Representatives of the clinical departments and of various community agencies participate in these conferences.

The student is urged to visit the home of his family at the earliest possible time. He then can become acquainted with the family, observe its social and environmental circumstances, and arrange for any health maintenance services which are indicated. Examination of all members of the family is suggested, so that the student will have a point of reference when he is called in during illness.

The student makes the initial home

visit by himself and, following his examination of the patient, he phones the family general practice clinic to discuss his findings with the general practitioner on duty. On the basis of advice received, he either administers or prescribes drugs, using for the latter a hospital prescription pad containing the name and phone number of the clinic director if any question arises regarding the prescription. A clinic physician is available to accompany the student upon a home call, if requested to do so.

There was some concern at first as to whether students were being allowed to assume too much responsibility in services to patients in the family care program. However, it has been our general experience to date that students accept this responsibility with considerable zest, and do not overstep the bounds of good judgment in rendering these services. The care of his family serves as a challenge to the student; he experiences a real feeling of achievement when he is able to meet the family's needs by calling upon his accumulated knowledge.

REFERENCES

1. "Health Resources in the United States," George W. Bachman and Associates. The Brookings Institution, Washington, D. C., page 64, 1952.

Prolonged Illness

MARTIN CHERKASKY

CREATING AN EXTRAMURAL medical care program for the chronically sick, suitable for teaching medical students, is not difficult in itself. Es-

Dr. Cherkasky is director, Montefiore Hospital, New York City.

sential and somewhat more difficult is delineating the character and problems of chronic disease. Once this is understood, the value and the structure of an extramural program unfolds itself. In this brief discussion

considerable attention will be given to the nature of chronic illness and to the general values of home care. Specific descriptive material about functioning home care programs can be found elsewhere.^{1,2}

Chronic disease is now the great medical problem facing the community. A study³ in 1935 revealed that there were more than 26 million Americans with some form of chronic disease, and 1.5 million or 1 per cent of the population were totally disabled.

Advances in nutrition, housing, public health techniques, chemical and biologic specifics, coupled with better understanding of the etiology and nature of the acute illnesses have all combined to extend the average span of life and curb the killers of a former day. This progress also has enabled us to extend the life of the patient with chronic disease by successful treatment of the intercurrent infections which formerly were so deadly. All these scientific advances have not denied death—just postponed it, and disease has not been banished—just changed.

A look at the weekly mortality reports will show that the diphtherias and typhoids have been replaced by the cancers and heart diseases; the change in the leaders in morbidity and mortality connotes something much deeper than just a change in name. There is a world of difference in the problems which arise in acute illness as compared with those which arise in long-term illness. To cope with the different problems of chronic disease requires a new or, perhaps, recaptured philosophy of medical practice. This change can only be brought about by a fresh approach on the part of our teachers and a revision of our medical school curriculum.

The Problems

To determine the direction our teaching must take and the usefulness of a home care program in such teaching, a concrete philosophy must be incorporated into the home care teaching program. The answers to the following questions will help clarify the content of this kind of extramural program: what is the nature of chronic disease? What are the skills, knowledges and techniques needed to meet the problem? How can a home care program make real to the student both the problems and the solutions?

Characteristics of chronic disease: It is most useful to point up the problem by comparing chronic illness with acute illness.

ONSET—The onset of acute illness is obvious, dramatic and frightening. The patient is unmistakably sick and his condition demands attention. In chronic disease the onset is frequently insidious and may not affect the patient's wellbeing seriously, at least at the beginning. This accounts for the infrequency of early diagnosis and the difficulty of primary and secondary prevention.⁴

DURATION AND OUTCOME — The length of illness in acute conditions is measured in days, with the expected result complete recovery and ability to assume all previous responsibilities. Chronic disease by definition is illness of long duration, and for the most part therapy does not result in a sharp conclusion with complete return to health. Recovery, even from the more acute phases of chronic disease, usually results in long periods of varying degrees of handicap and disability. This characteristic of long duration and associated disability is the hallmark of chronic disease and is in the main

responsible for all the concomitant problems which arise.

THERAPY—Therapy for most acute illness is now clearly defined, readily applied and highly successful. In chronic disease, therapy, while enormously advanced, has in the major illnesses such as heart disease, cancer, arthritis and neurological disorders, provided more in the nature of palliation than cure since our understanding of etiology and even of morbid physiology is incomplete. This of course is not true of all long-term illness. Some have been brilliantly overcome or controlled; e.g., pernicious anemia, pellagra, myxedema, thrombocytopenic purpura, to mention a few.

The patient and his family: The characteristics of chronic disease, then, are the following: long duration, measured in months and years; lack of definitive therapy; varying and usually increasing degrees of disability and handicap. As a result of these characteristics a whole series of ancillary problems result which often may be as serious in affecting the progress and the wellbeing of the patient as the disease itself.

These ancillary problems are the emotional, social and economic aberrations which accompany long-term illness. While they can be thought of separately for the sake of convenience, in fact the patient's illness and the resulting emotional and social problems are interrelated and form a vicious and ever enlarging circle.

A typical example is John D., a man of 45, the wage earner and the head of a family consisting of a wife and two sons, aged 13 and 9, who develops some abdominal discomfort, weight loss and disordered bowel habit. Hospitalization reveals a malignant growth in the bowel,

and surgery results not in a cure but in colostomy since there already has been spread to the lymphatics. To the resident in the hospital, the considerations are the patient's bowels, his blood, his hemoglobin, his nutrition, his physical rehabilitation and rarely anything more. But what about the rest of the chain of events set in motion when the diagnosis of incurable cancer has been made?

The family has sustained several frightful blows all at once. First of all, the man who was the head of the family, has been suddenly dethroned. Simultaneously, the family economy has been shattered by the loss of the wage earner and by the addition of a crushing burden of hospital and medical bills.

The wife now must support the family and, at the same time, try to meet the medical bills so that John and the family can maintain the dignity that only goes with paying your own way. During the day the children must be looked after by someone else.

The patient is not only distraught because of pain, major changes in body function and the threat to life, but he is seriously affected by the changes in his family situation. Serious illness injures the physical and psychic dignity of man and leads to the dissolution of normal family relationships. All these changes follow quickly in the wake of this illness and threaten the foundation of the individual and his family. The fact that in hospital the patient lies quietly does not mean that all is serene—this disruption of his life's work a few blocks away can more seriously affect his wellbeing than does his illness.

This, in brief, is the nature of chronic disease and its handmaidens. The doctor has and should accept as

his responsibility concern with all areas having to do with sickness as well as health, and it is obvious that consideration of many facets is necessary for him to do the total job for the chronically sick. With acute illness, the medical problem was about all the concern and so our hospital-focused program for care and education was fine. With chronic illness involving so many aspects of the patient's life outside the hospital, the focus must shift elsewhere.

The place to learn about the patient and his family is in the home—just as the place to learn chemistry is in the laboratory. The hospital stay must be recognized as not all of the patient's life but rather an important incident, only properly understood if the prologue and the epilogue are read as well. The areas of patient need fall within the areas of skill of the doctor, nurse and social worker, and this is the medical care team properly equipped to cope with the problem.

An Extramural Program

In view of the discussion delineating the nature of chronic illness and the considerations arising from it, a program of educational value must be so set up as to reveal the interrelationship of the patient, his family and society. The program likewise must reveal the many facets of long-term illness and demonstrate how the available skills can be pulled together to meet the patient's multiple needs.

A program geared to meeting the patient's needs in his home provides the cast and locale of such teaching. It is in the home that the family takes on meaning. In the home, the surroundings help to reveal the individuality of the patient, and the

doctor can see him without being distracted by other problems in the next bed. The home, not the hospital, is the natural habitat of the human being and it is here that, with proper instruction and participation, the student can learn about people, their hopes, dreams and aspirations. Here he can learn about the family as the biologic unit of health,⁵ and here he can see the functioning of the basic medical care team of doctor, nurse and social worker.

The preparation of the student for his home care experience to a large extent will determine what he will get from it. He should be exposed to didactic presentations covering the medical and social aspects of long-term illness. The areas of professional competence and responsibility of the doctor, nurse and social worker should be fully covered. The home care program should have a clear statement in written form of its objectives and criteria, and the student should familiarize himself with these guide lines. The period of time on home care should include observation of the activities of the team members individually when they visit patients in the home, and collectively when they have their conferences. The fullest value can be obtained only if the student is able to assume medical responsibility for a patient and his family under the careful supervision of the care team.

The doctor, nurse and social worker must be carefully selected so that the student working with them will see the qualities which he will hopefully acquire or nurture as a result of this experience.

Doctor: The doctor-preceptor must have high professional skill since this is a value the medical student appreciates. It will facilitate the student's ability to move forward to

other considerations. The physician on the home care program can demonstrate to the student concretely the value of humanity and kindness in dealing with the patient and his family. In a family setting, the student can be made keenly aware of the fact that to be successful a physician must have compassion and understanding as well as science. The support and courage the family draws from the doctor's concern and warmth may well help this young doctor of tomorrow recapture the homely virtues of the doctor of another day—virtues which made him the confidant of the patient and the counsellor of the family.

NURSE: By observation and contact the student will learn that the nurse has two major functions: (1) direct care of the patient, and (2) teaching nursing techniques to suitable members of the family. Direct service to the patient consists of the various procedures which the doctor has ordered and the nurse is skilled to perform. The student will see how the nurse uses the intimate contact she has with the patient to help him and his family adjust to the difficulties arising from the disease.

The modern public health nurse brings much more to patient care than manual skill alone.⁶ The nurse also teaches the patient self care and teaches members of the family how to carry out many nursing duties such as bed baths, hypodermic injections and similar tasks. This participation of the family in the direct care of the patient in many instances can be demonstrated to fulfill a psychological need—like the need of the mother to care for the child. In addition, if the student can learn useful methods of instructing patients and family in self care, it will be of great value in his practice. The major

contribution of the nurse to the doctor's education will be that he will develop an understanding of the part that the nurse can play in caring for the chronic disease patient. He thus will be better able to work with nurses and fully utilize their skills.

SOCIAL WORKER: The third key member of the home care team is the social worker. The student can join in her social evaluation of the suitability of a patient and family for home care. This will give him an understanding of the kind of interpersonal relationships which sick patients have with their families and vice versa.

The social worker will help the family use available community resources. This will be an opportunity for the doctor to learn about the whole range of services and facilities which urban communities have developed to meet the needs of its citizens. He will understand, as so few physicians do, the whole intricate structure of social agencies a physician can use in patient care.

The student will observe how the social worker develops rapport with the patient and his family. This enables the patient, in his own time, to bring to the surface all the fears engendered by his illness. The student will learn how important it is for the family and patient to have someone of professional standing to whom they can talk, and he will see how this process of bringing problems to the surface helps the family and patient adjust to a traumatic situation. This experience will not only enhance the student's general understanding and thus improve his own relations with patients, but also will give him an understanding of the function of the social worker and promote his ability to work with her in as well as out of the hospital.

Symposium on Extramural Facilities

Depending upon the extent and objectives of the home care program, it provides an opportunity for demonstrating many other skills and techniques. Rehabilitation in its broadest sense of enabling handicapped people to use the facilities they have to the utmost can be an educating experience. The role of the occupational therapist in providing useful and creative opportunities for patients will be in striking contrast to the unimaginative programs which are so common. The importance of recreational activities for the long-term sick is highlighted by seeing the patient in his own home.

Probably the most fruitful aspect of home care will be the opportunity for the student to join the team of health workers in their conferences. He will see how all aspects of the patient and his problem are considered and will realize the superior value of a socio-medical decision in the patient's interests. The medical student thus will develop understanding and respect for the other health skills which will enable him to work with them in fully discharging his responsibility to the patient.

In addition to the broader understanding to be derived, the experience in home care will have value in and of itself. Home care is an increasingly useful method of care for the long-term sick. It can provide a high level of medical care and also enable the patient to return to his place in the home and draw strength and support from his family. The student thus will become familiar with an administrative technique for provision of good medical care for the chronically ill.

Summary

Chronic disease is the great med-

ical problem today and for the foreseeable future. It brings with it serious emotional, social and economic problems for both patient and family. These phenomena can best be studied in the home where the family relations and problems are readily apparent.

For the purpose of such educational opportunity, a home care program for the chronically sick organized around a medical care team of a doctor, nurse and social worker can delineate clearly for the student physician the problems of the chronically sick, the skills and qualities needed to solve these problems and how these skills can be integrated and applied.

Reference constantly has been made to such home care programs as useful in medical education, but the principles apply equally well to education of other health workers.

REFERENCES

1. BAKST, H. J.: "Domiciliary Medical Care Program as Integrated Facility in Medical Curriculum," *Journ. Assn. Am. Med. Coll.*, 25: 406-417, November 1950 (part 1).
2. CHERKASKY, MARTIN: "The Montefiore Hospital Home Care Program," *Amer. Journ. Pub. Health*, Vol. 39, No. 2: 163-166, February 1949.
3. PERROTT, GEORGE ST. J.: "The Problem of Chronic Disease," *Psychosomatic Med.*, 7, 1: 21-27, January 1945.
4. Proceedings: "Preventive Aspects of Chronic Disease, Conference 1951." Raleigh, N. C., Health Publication Institute, Inc.
5. PEARSE, INNES H.; CROCKER, LUCY H.: "The Peckham Experiment," Yale University Press, 1945.
6. Proceedings, "First National Conference on Cardiovascular Disease, 1950," pp 229-230, International Press, New York.

Integration of Psychiatry

GEORGE H. CARTER, BERNARD BANDLER, HENRY J. BAKST

THE ALLOCATION of responsibility for a home medical care program to the department of preventive medicine at the Boston University School of Medicine has provided an opportunity to develop an integrated extramural educational activity involving the departments of medicine, pediatrics, preventive medicine and psychiatry. The organizational and administrative aspects of this program have already been described in considerable detail.¹ The utilization of this activity as a basis for interdisciplinary teaching in medicine and social work also has been discussed at length.² In this paper, the role of the department of psychiatry in focusing teaching on the comprehensive understanding of the patient and his illness will be presented.

At the beginning of the third year, each student is assigned to care for an individual patient in the home. Handling of the single patient usually leads the student to other members of the family. The development of a satisfactory relationship with the family as a whole, therefore, depends in some measure upon the effectiveness of the student's relationship with the individual patient.

Throughout the year, the student is supervised by an internist who visits and evaluates the patient with the student. Additional supervision is provided by a psychiatrist who sees each student individually in one-hour

sessions every six weeks throughout the year. At the time of the first psychiatric session, the student already has seen his patient and is usually anxious to discuss problems that have arisen. He is asked to reproduce, in as much detail as he can, his contact with the patient including his initial approach, his impressions and feelings about the patient and the environment, his observations of the patient's reactions and behavior, and his suppositions and hypotheses about the reason for important observed details of behavior and evidences of attitudes, emotions, etc.

The student then is asked to formulate a tentative evaluation in terms of specific disease processes, effects of disease on the patient's behavior, reactions to disease (feelings about it), ways of dealing with these reactions, effect on other members of the family and psychogenic factors in disease. An important aspect of the evaluation is the clarification of the nature of the specific doctor-patient (student-patient) relationship.

Frequently, the session produces a considerable modification and sometimes a reversal of the student's attitude toward the patient. He may then be given a series of suggestions, based upon the supervisor's evaluation of the material, on areas which need further investigation for a better understanding, as well as suggestions on how to handle individual problems. Subsequent sessions involve a repetition of the same process with increasing refinement of technique and understanding.

Dr. Carter is assistant professor in mental health, department of preventive medicine; Dr. Bandler is associate professor of psychiatry, department of psychiatry; Dr. Bakst is professor of preventive medicine, department of preventive medicine, Boston University School of Medicine, and the home medical service, Massachusetts Memorial Hospital.

The teaching is suited to the widely varying needs and abilities of the different students. Their success and progress are a function of a variety of factors: previous experience in handling people, sensitivity to other people's problems, grasp of previous teaching in psychiatry and ability to put this to practical use, and the somewhat unpredictable factor of the interplay of personalities of the student and his patient.

Specific Problems of Patients

The specific problems that the psychiatric supervisor has to deal with may be grouped arbitrarily under several headings:

1. The patient's attitude and behavior in relation to the current illness.

2. The relation between the reaction to the current illness and the patient's interpersonal relationships, especially with the family.

3. The relation between the patient's handling of the current illness and his previous patterns of behavior.

4. The contribution of emotional factors to the patient's illness or disability.

5. The degree of deviation of the patient's reaction from the optimum (presence or absence of clearcut psychoneurosis, psychosis or behavior difficulties).

6. The role of the student's personality and his reactions in handling the patient.

In all these categories specific suggestions may be made as to what areas need further investigation, how more information may be elicited, how the information obtained may be integrated into a better understanding of the problem and, finally, what may be done to help the patient handle current difficulties, be it through

listening sympathetically, giving specific information to the patient, adopting a special attitude, making practical suggestions as to what the patient can do about the problem, or whatever else may be indicated.

The division of the teaching material into these six general areas is arbitrary. There is, of course, considerable overlap. However, the initial goal in every case is to help the student toward a clearer understanding of each situation he meets, and to increase his ability to apply the basic concepts of comprehensive medicine in new situations.

An inseparable concomitant goal is, of course, the therapeutic one. In terms of the establishment of a workable doctor-patient relationship, therapy begins with the doctor's first contact with his patient. The student's intuitively sensitive handling of the patient's concerns is examined with the supervisor, and its effectiveness in helping the patient to express and relieve anxieties is stressed. The almost universal misconceptions of disease, disturbing distortions and misinterpretations of what doctors and friends have said, frightening ideas about prognosis are elicited by the student and clarified. This important and often neglected aspect of therapy is discussed in every instance.

Full-Time Assignment

The rather intensive experience with a single family during the third year helps prepare the student for a one-month full-time assignment on the home medical service in the fourth year, which is also under the supervision of the department of preventive medicine. At this time he is confronted with many of the conditions, realities and responsibilities of medical practice while under careful

faculty supervision. A weekly two-hour conference conducted by a member of the department of psychiatry with the five or six students on the service provides an opportunity for further integration of psychiatry and practical general medical experience.

At this stage of the training the student is, of course, far more advanced in his ability to make immediate and accurate observations in physical diagnosis than in personality or relationship diagnosis. Cyanosis, for example, will be noted and recorded automatically while the mother's conversation with the child and her attitude towards him, both fundamental to understanding the child's illness, may be appreciated only vaguely. A considerable amount of time in these fourth-year home medical service conferences, consequently, is spent in drilling on the fundamentals which already have been stressed in earlier training.

Once confronted with a psychological problem—whether it is recognized by the exclusion of somatic causes, by the patient's obvious emotional distress or through the student's sympathetic elicitation of the problem—the student finds himself on relatively uncharted seas without the compass of his medical techniques to steer his course. He knows the procedure of establishing a diagnosis of organic disease and how to start treatment. Without consideration of the total personality, his course, in this respect, is fairly clear and he feels reasonably secure as a doctor.

When confronted with problems of personality as they express themselves in disease or in reaction to it, however, what is he to look for? What questions should he ask, how is he to evaluate the significance of his observations and the relevance of the information given? What is impor-

tant? On what should he focus? How is he to arrive at an understanding of the patient's meaningful conflict? If he should succeed in all this, what is he to do about it?

In this situation, in spite of his training, he often feels that while possessing the prestige of a physician, he has only the competence of a layman. Furthermore, while he can achieve security in the practice of somatic medicine in relative independence of his own emotional development, once he is dealing with his patient's emotions, his own feelings become involved. The degree of his own maturity and his capacity to tolerate and to deal with emotions become important.

It is natural that a certain number of students, because of inexperience and the complexity of finding their way to understanding as well as their uncertainty in dealing with emotion, should shrink from psychological exploration. One common rationalization that is advanced is the time factor. How, it is argued, can a busy practitioner find time for the necessary repeated lengthy interviews that understanding and treatment require? The most he can do, he feels, is refer these patients to a psychiatrist or a psychiatric clinic.

As a rule, two reasons answer this argument to students' intellectual satisfaction. The first is a comparison of speed in their initial physical examination in their second year with the time now necessary to perform the same procedure. Similarly, with increased experience in talking to patients, they will be able to elicit the relevant psychological information more quickly. The second point is that the effort to understand patients actually will save time as compared to the total amount spent in ineffectual office and home visits when the

basic problem is untouched and the symptoms continue unabated.

Practical Methodology

What the student is seeking most at this stage of his development is a method of approach. What should he look for and why? In many home medical service conferences, considerable time is spent on this problem of practical methodology.

Four steps in practical methodology can be taken in order to focus on relevant material and to arrive at an understanding of the current conflicts. The first is development of the habit of psychological observation and the habit of reflecting on the significance of what the patient actually says. What the patient says affords important leads if the student only permits him to develop and elaborate upon them. The second step is appreciation by the student of the psychological importance of a detailed medical history.

The third step in practical methodology is the effort to arrive at an understanding of the patient's adjustment and relationships prior to the onset of his illness. Insofar as psychological factors contributed to the illness, the conflicts were already in full force before the appearance of symptoms, which from one point of view can be considered a pathological attempt at solution. Insofar as psychological factors appear as a response to the illness, it is important to know the nature of the adjustment which is now threatened by the illness. The problem the student is most concerned about in obtaining his picture of the patient's adjustment is on what to focus in order to understand the special pressures and disturbances in relationships which contributed to the illness. The patient almost invariably

has given him the leads in the course of a complete medical history. Where the student needs help most is in appreciating the significance of what he already has been told. Once this is clarified in the conference, he usually can proceed in his anamnestic inquiry into the recent and current adjustment.

One common error in interviewing technique at this point is for the student to be too eager to raise the subject of anxieties, problems and conflicts with the patient, and to ask too directly about his feelings. As a rule the patient is thoroughly willing to cooperate in giving a most detailed medical history. When psychological factors are touched on, however, in spite of conscious cooperation there are unconscious resistances. Insofar as the patient's personality has contributed to his illness, it has been his inability to face and to resolve his conflicts or his inner resistances that has brought him to the doctor. In all people there are anxieties and aspects of relationships which they are reluctant to recognize and which certainly will not be easily communicated to a stranger. The patient will inform the student of facts much more easily than feelings, yet the student will gradually be able to infer the feelings from the facts.

The fourth step is the effort to find the positive factors in the patient's adjustment. At times, too much emphasis has been placed on understanding the conflicts which have made the patient ill. These are important, but of equal importance is understanding the conditions and relationships under which the patient has been able to function optimally. The student will want to know not only what made the patient sick and what threatens him when he is sick, but also what made him well and

enabled him to live at his best. The most effective therapeutic techniques often are those which help the patient to reinstate the conditions and to reestablish the type of relationships which are most essential to him. Such knowledge, for example, will be extremely helpful in enabling the student to utilize other personnel effectively and to appreciate the response such as advice, encouragement, reassurance, permission, understanding, forgiveness, etc., which the patient expects from him.

The question of psychotherapy almost always comes up at some point in these conferences. The student occasionally thinks of therapy in terms of the most complex and difficult psychotherapeutic procedures such as psychoanalysis and "deep" interpretations. These are beyond his and the general practitioner's scope. He is inclined to undervalue the therapeutic effect of his being a good doctor, of his interest in the patient, of his willingness to listen and to accept whatever the patient tells him with tolerance and equanimity. The student is too immersed in assimilating what he has been taught to be ready for any therapy of an advanced nature.

Value of Conferences

The student learns nothing essentially new in the home medical service conferences. He is given an opportunity to develop his habits of observation, his technique of interviewing, his methods of approach to the human personality, as well as to

deepen, consolidate and make more meaningful his understanding of what he already has been taught.

Most important of all is the gradual integration within his own personality of a point of view. The inculcation of the concept of looking at the patient as a whole, quite apart from specific knowledge, is the goal and basic contribution of psychiatry to an extramural program.

This concept obviously is not the exclusive property of the psychiatrist, nor is its inculcation exclusively the task of the psychiatrist. By the time he has completed his fourth year, the student usually has deeply ingrained in his personality as a doctor an abiding recognition of the value of human beings and the importance of their personalities and their lives in health as well as in disease.

REFERENCES

1. BUSHNELL, C. W.: "Home Care and the Teaching Hospital," an essay presented to the faculty of the Yale School of Medicine in candidacy for the degree of Master of Public Health. New Haven, Conn., 1951.
- BAKST, H. J.: "A Domiciliary Medical Care Program as an Integrated Facility in Medical Education," *Journ. Assoc. Am. Med. Coll.* 25:406, November 1950.
- BAKST, H. J.: "Social and Environmental Medicine," *Boston Med. Quarterly* 1:18, June 1950.
2. STONE, B. S.; BAKST, H. J.: "Educational Experience in Social Work and Medicine in a Domiciliary Medical Care Service," *The Social Service Review* 26:42, March 1952.

Observation of the Family in the Home

JOHN P. HUBBARD

BASIC TO THE learning of any aspect of medical care is observation, and, insofar as possible, participation. The student learns far better in the laboratory and at the bedside than in the lecture hall. This principle has long been recognized in medical education; nevertheless, its application has been weak in teaching the student about the factors in the family and the home which may have important bearing upon health and illness.

Two reasons may account for this situation. First, the faculty, who often are appointed to their positions by virtue of outstanding achievement in research and clinical investigation, focus their attention and that of their students upon the highly specialized aspects of medicine as seen in the laboratories and the hospital. They point with justifiable pride to the hard won gains in the science of medicine and challenge the student, by precept and example, to follow the same path which they themselves have followed so successfully. Their time and thought have been continually devoted to the obscure problem case in the hospital or the effect of a new therapeutic procedure; it is not strange that they may sometimes be unimpressed with the benefit a student might gain from a visit to a home to investigate some intrafamilial emotional tension or some cause for recurrent respiratory infections.

A second reason lies in the very practical difficulties which may be

involved in arranging fruitful extramural learning experiences. Families in their homes cannot be studied in convenient succession like patients on a ward; a family environment cannot be brought in before a class in the familiar method of a case presentation. It takes time for students to observe family situations in the environment of the home and community. It also takes time on the part of the faculty, first to make the necessary arrangements, and then to discuss with the students the results of their visits and their observations. Whether time is allowed in the curriculum for observation of the family in the home will depend entirely upon the weight of faculty opinion which may support teaching of this nature. If deemed worthwhile, time can be found.

Many medical schools have devised ways of providing students varying degrees of contact with the family in its own home. For the most part this experience has been in the third or fourth medical school year along with clinical training. More recently, however, students have been brought directly into contact with families earlier in the curriculum, even at the beginning of the first year.

The Pennsylvania Plan

As an example of a plan which gives the student an opportunity for continuous contact with the same family throughout the four years of the medical curriculum, brief mention may be made of the family health advisor service at the University of

Dr. Hubbard is George S. Pepper professor of public health and preventive medicine, University of Pennsylvania School of Medicine.

Pennsylvania School of Medicine. Preliminary reports have described the experience of the first two exploratory years of this new teaching method.^{1,2}

Now, four years after the introduction of this plan, the freshman students who first undertook the program as an elective course in the fall of 1949 have reached graduation, and more students have been included in the group from each succeeding class. As students and faculty together have explored this experiment in learning, its values have become clearer and its position in the medical curriculum more firmly established.

This course—if it can be called a course—is under the joint auspices of the department of public health and preventive medicine and the department of psychiatry. At the beginning of each school year, a brief statement is made to the entering class describing the method and objectives of the program. Students are advised not to apply for it if they are apprehensive of overloading their program. At first, approximately one-half of the class applied; as its popularity has grown, about two-thirds of the class have expressed their desire to participate.

The families are selected with considerable care by the social service department of the University Hospital. As the program has expanded and as it has become increasingly familiar to the hospital staff, there has been little difficulty finding families suitable for assignment to the students.

The criteria for selection are few and flexible. The families should live conveniently close to the hospital so as to keep student travel time to a minimum. Most of these families look to the hospital for their medical care; only a very few have private family physicians, and in these few instances the cooperation of the family physi-

cian always is obtained. The social and economic status of the families varies greatly from those who are self-supporting to those who are on relief. It is considered important that there should be children in these families; in some instances a mother with her newborn baby is assigned from the maternity service.

During the first and second medical school years each student visits his assigned family in the home approximately once a month and more often as circumstances may indicate. The student also is called in when any member of his family attends the hospital ward or the outpatient department.

To maintain free, informal and intimate association between student and teacher—a feature essential to the success of this learning experience—the students are divided into groups of eight. Each group is supervised by a faculty team of three: two clinicians, one of whom is a psychiatrist, and a member of the social service department of the University Hospital. A separate faculty trio meets regularly with each group of students. Thus, for example, for the present first-year class in which there are eight groups, 24 faculty members are involved. It is anticipated that these faculty members will continue to meet the same group of students throughout their four years. The demand on the time of student or faculty during any one month is light; it is the accumulation of experience over four years which counts.

In the third year the student's relationship with his family is broadened during a two-week period allocated to public health and preventive medicine. During this period an opportunity is provided for the students to become familiar with community health agencies which, in one way or

Symposium on Extramural Facilities

another, may touch upon the health needs of their assigned families.

By means of individual visits to health centers, well-baby clinics, school health services, rehabilitation agencies, occupational health programs and many other services, the students come in direct and personal contact with community health resources. Their experience is real because it is related to specific problems with which they have become familiar in their assigned families. Invariably, following the visits, they have regularly scheduled time to discuss with the faculty what they have seen and what they have thought of what they have seen.

Value of Program

It is increasingly clear that this family health advisor service is having profound effects upon the students and, indeed, the entire teaching center. Reports submitted by students at the end of each year, records of interviews with students and impressions of faculty bear witness to the values in this training experience.

Early in the course of events, various members of the faculty team listened with surprised gratification when first- and second-year students began saying, "What we have learned in this experience is that we must consider the patient as a whole, rather than just his disease, and we must consider also the influence in his family and environment which affect his wellbeing."

These doctors-in-training give lively evidence that they are developing an appreciation of the place of the physician in promoting the health of the family unit. As they meet and learn to deal with the problems of parents, grandparents and children, they begin to see and accept some of the responsibilities of the practicing

physician, gaining this experience while still under supervision in the medical school. Equally important, they learn the limitations of the physician's role. To say "I don't know" without destroying the confidence of the patient, and to learn that there are problems beyond the physician's obligation are lessons which are a part of the preparation for practice and which, therefore, would seem to belong properly in the medical school.

Another value of this type of teaching program is the extent to which it may act as an integrating force in the teaching program. The student acts as coordinator between the patient and the hospital and the various services which may be involved in the patient's care. He is frequently in a position to interpret to the hospital staff factors which may have a bearing upon diagnosis or treatment.

Also, in the regularly scheduled group discussions, interdepartmental teaching becomes practical and effective. Members of the departments of medicine, preventive medicine, psychiatry, pediatrics, surgery and social service participate in the teaching irrespective of their specialty interests. The student may not know, or even particularly care, what departments may be represented as they discuss their problems with their faculty team.

Other schools have programs more or less similar to that described briefly above; still others are studying a variety of methods for bringing the student into direct contact with the home and the social environment in which the individual patient lives. Two recent conferences—one devoted to psychiatry and medical education, the other to the place of preventive medicine in medical schools—each in

its own way has emphasized the importance of methods to overcome the limitation of intramural medical school and hospital teaching.

In the report of the former, the following statement is found: "It seems desirable for medical students to study patients in their own home environment, where the emotional components of chronic and acute illness can be observed more effectively than on the wards or in the outpatient department. The application of home care services and long-continued follow-up can demonstrate realistically many of the sociological problems—such as poverty, delinquency, family strife—that contribute to illness, and can reveal the importance and value of utilizing ancillary facilities such as social service, public health nursing service, the courts, etc."³

Similarly, from a preliminary review of the Conference on Preventive Medicine in Medical Schools, the following is quoted: "It was generally agreed that it is hard, if not impossible, for a student to appreciate the social and environmental aspects of medical care when his learning experiences are confined within the walls of the medical school and hospital. Experiences in a home care plan, for example, where the clinical teaching of a number of departments includes service in peoples' homes, adds new dimensions to his insight into the care of patients."⁴

Comprehensive Programs

The family in its own home has a training potential of special importance in the teaching of preventive medicine, for here the student has an opportunity to look at health rather than disease; to look at the positive side of the ledger. In the normal course of events, the medical student sees people who already are patients

—something has gone wrong and the patient seeks medical attention to help set matters right. On the other hand, when a student assumes responsibility for the health of a family—especially when this responsibility is continuous over his four years of medical school—he learns to think in terms of what may be done to help keep people from becoming patients.

In the home the student has the opportunity to observe and to participate in an active program of health maintenance for the family: health supervision for the infants and preschool children, follow-up of school health programs, the nutritional status of the family, the emotional tensions of intrafamilial relationships, the detection and management of chronic disease and the problems of the aged and senile.

This type of family health service should be distinguished from the type of home care program in which the student visits a family only when called upon for purposes of diagnosis and therapy. In such programs the students are generally "on service" for a limited period of a few weeks or a few months. They may visit a particular home only once or twice for a specific problem which may be focused on a reddened ear drum or an abnormal blood count. Diagnosis is discussed with the faculty, treatment is prescribed, the student's responsibility ends and he goes on to the next patient. The attention is primarily upon medical care rendered by the student for medically indigent patients.

These service programs have an inherent danger which is familiar to those who have had experience with them. There is a temptation to use the students' time to meet a demand for medical attention for those who cannot afford private care.

Expediency may outweigh teaching value. In any event, a home care program designed primarily for definitive treatment of specific episodes should be distinguished from that described above where the primary emphasis is graduated experience in family health as well as illness. When treatment is the primary purpose of a visit, the situation is really a home sample of what has aptly been called "episodic medicine."

In contrast, a periodic home visit may have no episode to precipitate the call. The student visits the family at his and their convenience for the purpose of observing the home environment and evaluating the family's health status. At the first visit there are apt to be problems which cannot be solved upon that particular occasion; there are other problems which may not even appear at first glance. The student's responsibility for the family and its complexity of medical needs does not end with the visit but continues from month to

month, similar to the experience of the family physician. Only as the doctor or the doctor-in-training has time to gain the confidence of all members of the family on repeated visits, and to seek beyond the obvious, will it be possible for him to deal with all the factors involved in promoting the health of the family unit.

REFERENCES

1. HUBBARD, J. P.; MITCHELL, J. McK.; POOLE, M. L.; ROGERS, A. M.: "The Family in the Training of Medical Students," *Journ. Med. Edu.*, 27:10-18, January 1952.
2. APPEL, KENNETH E.; MITCHELL, JOHN McK.; LHAMON, WILLIAM T., "Psychiatric Values in a New Method of Medical Education," *Amer. Journ. Psychiatry*, 109 (2):102-107, August 1952.
3. American Psychiatric Association: "Psychiatry and Medical Education." Washington, 1952.
4. CLARK, KATHARINE G.; HUBBARD, JOHN P.: "Conference on Preventive Medicine in Medical Schools," *Journ. Med. Edu.*, 28 (3):43-48, March 1953.

Disease Prevention and Health Service

KINLOCH NELSON, EDWARD HOLMES

IN THE PAST few years the teaching of public health and preventive medicine in American medical schools has been undergoing a gradual and somewhat radical change. This transition is in part the result of changes in the total public health program.

Between 1930 and 1950, as the infectious diseases came under better control, public health workers began

to direct their attention to newer problems such as chronic diseases and the aging population. During this time the public became aware of the social and economic problems resulting from the increase in man's longevity and demanded that health and welfare agencies give them needed attention. Along with these changes came alterations in the curriculum content and teaching techniques of departments of public health and preventive medicine.

In the Medical College of Virginia,

Dr. Nelson is professor of clinical medicine and clinical director of the home care service, Medical College of Virginia. Dr. Holmes is professor of community medicine at the college and director of public health, city of Richmond.

two events greatly influenced teaching in the department of community medicine. The first was an informal study of the curriculum which led to a marked reduction in the total number of lecture hours and field trips under the old department of public health and preventive medicine, as it was found that much of the data already were being presented in the teaching programs of the departments of bacteriology, medicine, pediatrics, physical medicine and psychiatry. Informal seminars of small groups of students were substituted. The second event was establishment of a cooperative plan between the Medical College of Virginia and the city health department to provide medical care to the indigent. This latter program, the present home care program, came about as follows.

Since its establishment in 1909, the Richmond Department of Public Health has been charged with the responsibility of providing medical care for the indigent. Through the years it has conducted a home visiting service by physicians as a part of its over-all medical care program. In the summer of 1947, a series of incidents suggesting inadequacies in the quality of this visiting service caused the staff to reevaluate it.

Many inherent weaknesses were revealed. Spot checking of the records showed them to be sketchy at best. There was no continuity between the patient's home and hospital or outpatient care, as the doctors providing home care had no connection with the medical college where these patients received clinic service and hospitalization.

Follow-up visits were not made routinely, but only when requested by a member of the sick person's family. Such return visits frequently

were initiated by nurses or social workers. Laboratory service was not provided. Payment for drugs on city indigent prescriptions was limited to 25 per cent of the purchase price. There was no medical supervision of physicians working in this service. As a consequence, service was of poor quality.

After this informal review, a study of similar programs in 17 other cities of comparable population was undertaken by questionnaire. The information obtained seemed of doubtful value for it was obvious that very little was being done to provide medical care for the indigent on a systematic and economical basis. It became apparent that home care in Richmond was neither better nor worse than that provided elsewhere. These studies convinced the directors that a communitywide survey was necessary if the city was to be stimulated to support a comprehensive program.

In the fall of 1947, the health division of the Richmond Area Community Council was asked to study the problem and to make recommendations for an adequate service. A committee from this division suggested:

1. That the city abandon the use of the six part-time physicians.
2. That it establish within the Medical College of Virginia a home care service staffed by residents in general practice working under faculty preceptors.
3. That, as soon as practical, medical students be introduced into the program.
4. That the hospitalization and outpatient clinic service for the indigent be coordinated with the home care service under a qualified director from the faculty of the department of medicine of the college so that

continuity of care could be assured.

Thus, the home care program would be an integral part of the total medical care furnished by it, the clinics, hospitals and emergency rooms. It would be set up within the medical aid bureau in the department of public health. This bureau, with offices in the outpatient department of the college, already had the responsibility for clinics, hospital, dental, ambulance and coroner service to the indigent and medically indigent of the city.

Objectives of the Program

Specific objectives were:

1. To demonstrate that medical care of high quality, giving continuity of service between home, clinic and hospital, could be provided by a public health agency to the indigent and medically indigent under a coordinated plan in cooperation with a medical college.

2. That the faculty, residents, interns and students of the medical college could be made aware of the problems of a home medical care service and the social aspects of the practice of medicine among low income groups.

3. That in time data might be collected which would be valuable from the research point of view by providing complete medical records from home to hospital and back to home for follow-up care.

The plan was put in operation in July 1949, and senior medical students were assigned to it in November. An advisory committee of physicians (both general practitioners and specialists), nurses and social workers was established. This committee was concerned with program evaluation.

Administrative responsibility was

shared jointly by the clinical director and an administrative assistant. The clinical director devoted one-half of his time to the program, and, with his associates from the faculty of the department of medicine of the college, was administratively and technically responsible for the quality of medical care and the teaching of residents and medical students assigned to this service. The administrative assistant devoted approximately one-half of his time to the program, and was responsible for the interpretation of established policies, details of budgeting and the supervision of the clerical staff.

Medical social workers were employed in the service, the chief of whom was responsible to both the administrative assistant and the clinical director. She was in charge of the social aspects of program planning, the development of suitable liaison with other community agencies, consultation and teaching in the home care service itself, and supervision of the social service staff.

Consultation on the nursing aspects of the home care program was available through the director of the Instructive Visiting Nurses' Association and the director of public health nursing, Richmond Department of Public Health. These services have since been combined into a community nursing service jointly sponsored by both agencies.

Services not available within the health department and medical college were arranged for through working agreements with appropriate community agencies.

Policies and Procedures

Over the past four years numerous readjustments and minor changes

have been necessary. Referrals now are accepted from any individual or agency in the community. They come chiefly as direct calls from patients over the switchboard maintained for this purpose and for ambulance calls. The telephone operator attempts to determine financial eligibility and source of most recent medical care. Medical students in pairs answer these calls in automobiles provided by the city. They evaluate the case in the home, medically, socially and economically. When they return to the office their records are reviewed by residents and preceptors. The patient then may be revisited by the residents or preceptors, or both, with these same students as indicated from the discussion of the individual patients.

The social workers take an important part in these reviews and there is free discussion by all concerned of the medical, social and economic problems of the particular case, with further investigation of financial status when necessary. Decisions are made by the residents and preceptors as to continuing care in the home, other arrangements for care such as hospitalization, or termination of medical service.

When other services such as emergency financial help, nursing, housekeepers or sick room supplies are needed, they are requested from the appropriate agency by telephone with follow-up in writing.

Services to Patients

The general medical service is similar to that given by any physician to his patients. All laboratory tests are available through the laboratory of the medical college and the health department on specimens brought in to them. Drugs are carried to the pa-

tients in the physician's bag. Simple remedies are encouraged. All types of drugs are available through the Medical College of Virginia pharmacy. Hospital and clinic records of these patients can be obtained readily from the central record room.

There is close cooperation with the clinic, emergency room and hospital staff to whom patients are sent and from whom patients are received by the home service. Thus, continuity of observation is maintained in both directions from home to hospital and from hospital to home. All the consulting services of the hospitals and clinics are available; many visits to the home are made on request by the personnel in various special fields. The department of physical medicine is freely used in efforts toward rehabilitation.

Teaching Opportunities

Students and residents have daily supervised experience in observing and learning the management of patients as they become ill in their native surroundings. Not only is clinical medicine forcibly presented, but there is great opportunity to bring out the problems of preventive medicine and public health of patients seen only a few hours before by students who have made the first medical contact with the patient. The efforts to the community, through its organized agencies, to take care of this group are appreciated and this area of community medicine is clarified.

In addition to the daily informal meetings of students, residents, preceptors and social workers, there are three one-hour meetings a week. In two of these the students present cases selected to illustrate some medical, social or economic problem.

These cases are discussed by representatives of the program and other concerned community agencies. The third meeting is devoted to general discussion of community health problems. These seminars afford opportunity for discussion by experts of all phases of the problems of the individual case.

One of the preceptors, accompanied by the students and residents, makes ward rounds once a week on the patients sent into the hospital by the home service, thus improving the follow-up and continuity of care. At these times students' knowledge of the patient's general surroundings is communicated to the hospital staff and social workers. This often helps greatly in the hospital management and disposition of individual cases.

Summary and Conclusions

1. The home care service affords opportunity, heretofore unavailable in this area, for indigent and medically indigent persons to receive reasonably continuous medical care

from onset of illness through whatever procedures of therapy and rehabilitation are indicated until return to useful activity or death.

2. This service is made possible through the cooperation of a medical school and a city department of health.

3. In this program, residents and students become acquainted with the patient as a human being, a member of a family, a unit of the community. They see that diagnosis and treatment are not enough. They realize that the patient's social and economic status must receive due consideration or else diagnosis and treatment are often of little fundamental value. They begin to grasp the problems of public health and preventive medicine as illustrated by patients they have served as family doctor. They see how one community attempts to overcome these problems; thus, they are given practical experience through which they may become useful in attempting to solve similar difficulties wherever they may go later as practitioners.

Comprehensive Medical Care

GEORGE G. READER

COMPREHENSIVE CARE is a term much used today, not only by teachers of medicine but also by politicians fostering governmental insurance, by proponents of prepaid care, and by spokesmen for organized medicine in describing the insurance plans of some county medical societies. It seems unlikely that the connotations of the term are identical in the minds of those who use it.

Dr. Reader is director, comprehensive care and teaching program, New York Hospital—Cornell Medical Center.

Aside from the varying connotations used by special interests, however, comprehensive medical care is basically the preservation of health and the prevention as well as the cure of disease. In practice this implies attention to emotional and psychiatric as well as physical factors, and continuing supervision of the patient in clinic, hospital or home for a sufficient period of time to bring him through convalescence and rehabilitation to an optimal state of health and productivity, and to maintain

him in it. Comprehensive care also implies compassionate care; human consideration for the patient as a person. It solicits his cooperation and imparts to him a willingness to help without invading his rights as an individual.

Physicians have given this type of care many times to individuals but rarely have applied it in its entirety to a group. The family physician of a hundred years ago who knew all the people in his community practiced comprehensive medicine in the sense that he applied to his patients all the known skills of medicine, and that he regularly considered social and economic factors as a natural part of diagnosis and treatment.

The great expansion of knowledge resulting from the application of the scientific method to problems of health now has made it impossible to provide such care to all patients without the careful planning and the considerable labor of many people. Comprehensive medical care in its entirety includes diagnostic and therapeutic medicine and the specialists without whom neither can be practiced adequately today, and social workers and nurses, clerks and technicians. It often requires community agencies and the physical facilities of the hospital such as beds, clinics and excellent laboratories. It occasionally necessitates the cooperation of all health and welfare personnel in the utilization of most of the diagnostic and therapeutic methods known to modern scientific medicine.

Only a minority of patients require the all-out effort of the hospital and community for their proper care. Since the unique features of comprehensive care are primarily related to a method and a point of view, many hospitals now providing segmental care could give more com-

plete service to those patients particularly requiring it by a reorientation from physician convenience to patient need.

Training of physicians and others to practice comprehensive medicine as well as to perform the scientific investigation of the relevance to the health of the individual of social, environmental, economic and emotional factors would appear to be the necessary and appropriate obligation of the modern medical center. Likewise, teaching of comprehensive care to medical students as a regular part of the medical school curriculum should be considered as important a duty as clinical teaching on the hospital wards. In both instances it may be accomplished most easily by giving the student actual patient responsibility under supervision and opportunity to participate as a member of the medical care team.

The Cornell Program

In approaching the problem of teaching comprehensive medical care, each of the precepts outlined above was considered seriously. Selection of personnel to coordinate expert knowledge, hospital facilities and community agencies was the first step toward organization of the program in July 1951.

The form the program should take in the structure of the medical center was considered of next importance. To emphasize the integration necessary to the practice of comprehensive care, therefore, it was decided to set up the program as a nondepartmental activity of the center as a whole.

The president of the joint administrative board then appointed an advisory committee composed of the clinical department heads, the pro-

fessor of preventive medicine and public health, the directors of nursing and social service, the chairman of the outpatient department committee, the superintendent of the hospital, the dean of the medical college and himself. At its initial meeting the committee elected the professor of medicine and physician-in-chief of the hospital as its first chairman, and appointed a staff to direct the organization of the program during the year 1951-52.

It quickly became evident that the locus of activities should be divided between the general medical and general pediatric clinics; first, because it was thought impractical to establish a new clinic and, second, because the staff felt it was important to emphasize that comprehensive care is an idea and not a place. Offices for the program were set up in the general medical clinic as a matter of convenience.

To provide a smooth flow of suitable patients through the general medical clinic, the staff improved the appointment system and established an emergency clinic where patients too ill to await future appointments could be seen promptly. They also began a systematic chart review and organized a consultant group to provide service to other clinics of the hospital, and at the same time screen patients for admission to the general medical clinic. Similar although less extensive changes were effected in the general pediatric clinic.

By June 1952, clinic reorganization had been completed, and the advisory committee had appointed a full-time director who is an internist, and assistant directors for medicine and pediatrics. Further appointments of half-time consultants in surgery, obstetrics and gynecology, psychiatry

and preventive medicine, who were responsible for the participation of their respective departments, assured adequate consultant coverage at all times.

A public health nurse also was added to the staff to provide liaison with community nursing agencies as well as to supervise the nursing activities of the program at the hospital. In addition she has served as the contact person for the family care patients who could not wait for a regular clinic appointment.

The social work coordinator on the program staff already had carried out a survey of community resources and arranged to supervise other workers from her department who might become involved with patients receiving comprehensive care. She also accepted the responsibility for interpreting the program to new patients.

Student Participation

It was generally agreed that one of the most important principles of teaching comprehensive care was provision for prolonged student contact with the same group of patients. Beginning with the academic year 1952-53, therefore, the fourth year curriculum of the medical college was altered to permit students to serve continuously for 22½ weeks in the general medical clinic and, at the same time, for 11 weeks in the psychiatric and pediatric clinics. This was in contrast to the two months each of separate medical, pediatric and psychiatric clinic experience that had previously characterized the fourth year.

Student experience in the course in comprehensive medicine has included patient care, conferences, lectures and seminars, with the greatest proportion of time spent in examina-

TABLE I
Variety of Clinical Experience in Course
in Comprehensive Medicine
 Medical, Pediatric and Specialty Clinics
 43 Students
 (September 15—October 3, 1952)
 Number and Percentage Distribution of Diagnoses

Type of Diagnosis (a)	All Diagnoses	
	Number	Per cent
All diagnoses	1245	100
Tuberculosis	20	2
Syphilis	17	1
Other infectious and parasitic diseases	26	2
Neoplasms	47	4
Allergic disorders	48	4
Endocrine and metabolic disorders	90	7
Diseases of blood-forming organs	22	2
Mental disorders	121	10
Diseases of nervous system and sense organs	91	7
Cardiovascular disorders	161	13
Respiratory disorders	111	9
Digestive disorders	147	12
Genital-urinary disorders	71	6
Deliveries, complications of pregnancy, childbirth, puerperium	1	—
Diseases of skin and cellular tissues	99	8
Diseases of bones and organs of movement	56	4
Congenital malformations and diseases of early infancy	35	3
Nervousness, debility, unspec. headache, senility, other ill-defined conditions	18	1
Accidents, poisonings and violence	5	—
Healthy individual	46	4
Prenatal and postnatal care	3	—
Undetermined, undiagnosed, deferred	9	1

(a) Classification was based on the International Statistical Classification.

tion and treatment of patients. Particular effort has been devoted to making the students feel like colleagues of the instructors.

The patients available to students during the course are those regularly attending the general medical, pediatric and psychiatric clinics. For the general medical clinic this includes diabetics and consultation patients referred for diagnosis by physicians in the community, in addition to regular medical patients.

The students make the initial contact with the patients, complete a history and physical examination, and then present the case to an instructor who acts as consultant. Ultimate responsibility for the care given a patient devolves upon the instructor, but the student is encouraged to

feel that he is the patient's physician. It is estimated that a student may have as many as 250 patient contacts during his six months under the program. Table I indicates the variety of clinical experience obtained by 43 students for one three-week period in October 1952.

Within the framework of the comprehensive care program, three specific categories have been set up as a matter of convenience and to provide certain emphases in teaching. These are family care, home care and rehabilitation. Each student is given responsibility for a small group of patients selected for family care according to the following criteria: (1) that one family member have an illness requiring continued medical supervision, (2) that preference be

Symposium on Extramural Facilities

given to families which include young children, (3) that the family live within a reasonable distance of the New York Hospital, and (4) that the social problems of the family not be overwhelmingly complex. These patients are accepted for an indefinite period.

At least one family care patient is assigned to each student, and passed from student to student as the course ends and a new one begins. One or several home care and rehabilitation patients also may be assigned. The optimal number of such patients for any given student has yet to be determined.

The student schedule (see Table II) is designed to give the students two three-hour periods a week unallocated to specific clinical duties, which permits a certain flexibility necessary to allow for house calls and other unscheduled activities. Also, the students can use this time for special visits with patients.

A preceptor is assigned to each group of 10 or 11 students, and he uses the first hour of the seminar

period to meet with them for case discussions, journal clubs or didactic conferences. The preceptors are clinicians: two pediatricians and two internists. They provide pedagogical continuity to the students over 11 weeks, at which point the pediatric preceptors and the internists exchange groups. The preceptors get to know the students intimately, guide them in choice of subjects for discussion and try to clear up contradictions.

In addition to their work in the medical, pediatric and psychiatric clinics and in the seminar sessions, the students have an opportunity to work in two different subspecialties one-half day a week for 11 weeks. These are offered on an elective basis and four different choices are possible in medical or pediatric subspecialties, or in psychiatry or preventive medicine.

During the course students are expected to attend medical and pediatric grand rounds once a week as well as clinical-pathological conference and the Cornell Conference on Therapy.

TABLE II
Detailed Schedule
Medical Comprehensive Care

Morning:	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
Group I { A B	Pediatrics Medicine	Medicine Pediatrics	Pediatrics Medicine	All Groups (9:00-10:00) Lecture (10:00-11:30)	Medicine	All Groups Special Conference
II { C D	Seminar Sp'ty Elec.	Sp'ty Elec. Seminar	Seminar Medicine S	Medical Grand Rounds (12:00-1:00) Radiology	Sp'ty Elec. Seminar	
Afternoon:						
I { A B	{ Seminar Pediatrics Sp'ty Elec.	Sp'ty Elec. Seminar	All Groups (2:00-3:00) Psychiatry (3:00-4:00)	Seminar Sp'ty Elec.	Sp'ty Elec. Seminar Pediatrics Medicine	
II { C D	Psychiatry Medicine	Medicine Psychiatry	Com. Care Conf (4:00-5:00) Special Lecture	Psychiatry Medicine	Psychiatry (4:00-5:00) All Groups Pediatric Grand Rounds	

Groups I and II switch at the end of eleven weeks.

In addition, a one-hour lecture on problems of ambulatory medicine is given each week.

The comprehensive care conference is held each Wednesday afternoon, and during this hour one student presents the family for whom he serves as physician to the rest of the class and to the program staff. Focus of the presentation is the one most pressing problem for the physician whether it be social or economic, or the problem of diagnosis and treatment of a clinical entity. Inter-relationship of disease and family structure are brought out in the discussion period that follows the presentation. Various experts, in addition to the staff, may be brought in to comment on points in presentation.

Informal conferences also are held once a month. During these, each student is asked for a progress report on the family under his care, and free discussion is encouraged among the students, social workers, public health nurse, preceptor and preventive medicine consultant.

Summary and Conclusions

Since comprehensive medical care providing the broad approach required by some patients is rarely practiced today, it is the obligation of those concerned with medical education to train personnel for this important work. As in all clinical teaching, practice must precede pedagogy so that a team of experts under the direction of a physician first must be assembled to coordinate the facilities of community and hospital in the centralized, continuous, humane care of those patients who can no longer cope with the problems of living without outside assistance.

Medical students, in order to obtain a satisfactory experience, must be

integrated into the team as physicians and given responsibility for patients under appropriate supervision in clinic, hospital and home over several months. Care of family groups appears to be particularly desirable as an example to the student of the importance of social and environmental factors in disease.

Advantages that may accrue include a greater sense of maturity and responsibility on the part of the students, an understanding of the natural course of illness and the problems of management of ambulatory patients, the technique of caring for a patient at home, a consciousness of the costs of medical care, and the proper use of consultants. Rather than learning less scientific and traditional medicine under such a program, there is good reason to believe the students actually learn more.

Participation in care of patients is a powerful motivation to learn about disease through observation, discussion with instructors and reading in texts and journals. Short-term contact with patients makes each one a demonstration, valuable as such but not to be compared with the advantages to be obtained by long-term follow-up and consideration of all the problems the patient encounters that affect the state of his health.

Diagnosis and therapy of disease have been taught well for years; if consideration for patients as human beings continually reacting to the stresses of life can be added to that teaching, our medical schools should graduate better physicians. But it should be clearly understood that since the principles of comprehensive care never have been applied in their entirety to a group of patients, any attempt to undertake this seriously must be regarded as experimental and tentative. Whether any medical

center can obtain the necessary cooperation of its staff and can coordinate its facilities and those of the community to provide patient-oriented medical care rather than physician-oriented segmental care, and at

the same time transmit these concepts to medical students, remains to be determined. Early experience suggests that it is not only possible but that it is also productive beyond expectation.

Medical Care

HENRY J. BAKST

THE HOME MEDICAL service at Boston University and the Massachusetts Memorial Hospitals provides domiciliary medical care within a square mile surrounding the hospital and medical school. This area contains a low-income, multi-racial population of more than 50,000. Home visits are made to patients who are not under the care of a private physician and have an income within the limits acceptable for outpatient admission. The standard of eligibility for admission as an outpatient is established by the Hospital Council of Metropolitan Boston. Over one-third of the home medical service patients are recipients of financial assistance from official relief agencies.

Requests for medical care are received directly from patients, social and health agencies, private physicians and hospitals which refer patients for continuation of treatment. About 15,000 home visits are made annually to approximately 5,000 patients. Care in the home is continued as long as it represents the most satisfactory mode of treatment for the patient. Eighty-five per cent of the patients seen are treated at home, almost 9 per cent are referred to the

outpatient department for further evaluation, and about 7 per cent are admitted directly to the hospital.¹

Responsibility for the administration of the home medical service and the outpatient department is centralized in the department of preventive medicine. The medical services which are available at home are essentially those which would be provided by a general practitioner or family doctor in an urban area. The problems which are encountered are as many and varied as would be expected in any well-established general practice dealing with marginal income families.

In 1948, extensive reorganization of the service was undertaken.² It was recognized at this time that an adequate level of medical care could not be obtained in the absence of fairly intensive coordination of facilities and services. Serious consideration was given, therefore, to the problem of creating an extramural organization which could compare favorably with the quality of medical care provided on the wards of most teaching hospitals. This implied the availability of routine laboratory facilities, student supervision and teaching by a clinical staff, specialist consultations and coordination with outpatient clinics and inpatient services.

Two additional requirements were obviously apparent. The first was the

Dr. Bakst is professor of medicine, Boston University School of Medicine, and director, home medical and outpatient services, Massachusetts Memorial Hospitals.

need to develop an awareness of the range and nature of community resources for health. A necessary corollary was a practical understanding of the manner in which these services could be best utilized. A well-trained medical social worker, therefore, was included on the regular staff of the home medical service. The second requirement was an equally indispensable need for a source of bedside nursing in the home.

Medical Care Team

The fulfillment of these goals resulted in development of a teamwork approach to medical care in which the doctor, nurse and social worker functioned as the primary members of the team.³ Within this framework, the medical student is given an opportunity to participate in an integrated extramural program.

The medical student soon learns that in the organization of services for medical care the nurse is traditionally and justifiably an indispensable contributor. He also becomes aware that in a society in which chronic disease is of increasing importance, the utilization of the medical social worker, in order to channel effective support for the benefit of the patient, is an area of constantly enlarging emphasis. As a result of his daily experience, he develops an understanding of the character and significance of the burden of disease in the community. And he learns to utilize community agencies effectively in dealing with the total health problems of his patients.

During the development of this program, it became quite apparent that the scope and nature of the educational experience could be ex-

tended considerably. It seemed reasonable to assume that with coordination and correlation of various medical services as a goal, an opportunity was available for mutual participation by students representing the three primary areas of the medical care team. An undergraduate organization then could evolve in which each student group would work with problems of mutual interest under the guidance of their individual supervisors. It thus became a matter of importance to delineate as sharply as possible the area of responsibility of the physician, nurse and social worker so that their activities at the student level would be maintained within the limits of practical reality.

THE NURSE: Within such an organization, the nurse is considered to have three main functions: providing direct nursing service to the patient, teaching the patient or members of the household to carry out certain nursing procedures, and serving as a source of health education.

It is accepted that nursing today is not simply a matter of carrying out the doctor's orders. It has been supplemented by activities which require initiative and judgment and has become increasingly significant in the sharing of responsibility in communitywide planning and in the provision of continuous care to individuals.⁴ Student nurse participation in the home medical service results in a close working relationship with the student physician in an attainment of a common goal. An opportunity to understand the patient and the many significant health problems of a socio-environmental nature is provided. As a result of this experience, a contribution is made toward more mature and enlightened consideration of the function of the

nurse on the team for medical care.

THE MEDICAL SOCIAL WORKER: Social work in a medical setting is a somewhat newer discipline which has attained organized professional stature comparatively recently. With its origin in the hospital and its roots in the complex problems of modern society, medical social work has reached a stage in which its role in helping to fulfill the aims of medicine is beyond question.⁵

The relationship of social factors to illness was most adequately stated by the Joint Committee of the Association of American Medical Colleges and the American Association of Medical Social Workers in 1948. This report states: "There are three major features of illness—physical, emotional and social; these are so intimately interwoven in the pattern of disease that they must be considered together rather than as separate entities; all three must be included in the curriculum if medical education is to provide the student with the knowledge and skills necessary to fulfill the aims of medicine."⁶

The utilization of the medical social worker in the education of the medical student has wide and general acceptance. Teaching of a most significant nature appears to develop when the social worker functions as a regular participating member of the staff, and when her findings and recommendations are incorporated in the consideration of a total plan for comprehensive patient care.⁷

The teamwork approach is further emphasized by the integration of medical school and hospital personnel, the utilization of hospital facilities and the coordination of health and social agencies in the community.⁸

While every effort is made to provide the medical student with a use-

ful and productive experience on the home medical service, prolonged and sustained observation of clinical problems are difficult to attain in a one-month assignment. It was with a desire to overcome this difficulty that a family study program was developed within the framework of the service. For this purpose a family was selected for each third-year student from the total patient load. The criteria for family selection consisted of:

1. Willingness of the family to participate.
2. A chronic illness in one member of the family.
3. The presence of several children of preschool age if possible.

Through a process of trial and error, it was finally decided to assign the chronically ill patients to the third-year students. Care is taken to indicate that, in large measure, the acceptance of the student as a source of family medical care is dependent upon his relationship with the assigned patient. Actually it is extremely rare for a student to be unable to develop a satisfactory relationship.

Under the supervision of practicing physicians and a psychiatrist, these students function as family doctors throughout the third year. Additional support in providing medical care is derived from the social service and nursing staff of the home medical service.

It is estimated that students spend 75 hours on this assignment during the entire third year. Altogether this program has proved a broadening and practical educational experience through which the student is introduced to the many and varied aspects of comprehensive medical care. It also serves as an introduction to the more intensive assignment on the

home medical service in the fourth year.

Conclusions

It is quite apparent that the medical student who faces a clinical problem in the home of the patient, the student nurse who sees the way this patient lives, and the social work student who conducts her interview in the patient's home are participating in a mutually beneficial experience. Against the background of careful supervision in medicine, nursing and social work, the student groups function in a medium in which at the practicing and instructional level there is the closest co-operation and awareness of the contribution which each has to make in the organized provision of medical care.

By example and by participation, this experience at the student level is the most appropriate and productive period in which to develop cooperative activity based on mutual understanding. It already is apparent that students who participate in this kind of learning experience develop a relationship which becomes part of their attitude in later life. Each group of students develops an awareness of the contributions the others may make in the comprehensive problems of planning for and dealing with the health needs of the individual and the community.

It appears a reasonable assumption that the adequacy of medical care is closely related to a realistic awareness of the changing needs of the patient. The procedure by which such an awareness is realized in a large and complex society is obviously difficult and, to a significant degree, dependent upon a broad understanding of the social, cultural, and economic

changes which influence our health needs.

It is difficult to avoid the conclusion that the undergraduate medical curriculum, with the aid and support of related disciplines, is the cornerstone upon which such an understanding may be based. It is further apparent that the methodology of the educational process must remain flexible and mobile in order to adapt itself easily to the changing practical issues which will face the end product of intensive and costly medical education.

REFERENCES

1. BAKST, H. J.: "Domiciliary Medical Care and the Voluntary Hospital." Presented at the Health Officers, Medical Care and Public Health Nursing Sections and Conference for Health Council Work of American Public Health Association. Cleveland, October 21, 1952.
2. BAKST, H. J.: "A Domiciliary Medical Care Program as an Integrated Facility in the Medical Curriculum, *Journ. Assn. Am. Med. Coll.* 25:406, November 1950.
3. DICKINSON, F. G.: "The Medical Care Team," *Ann. Am. Academy of Political and Social Sci.* 273:25, January 1951.
4. FREEMAN, R. B.: "Public Health Nursing Practice." W. B. Saunders Co., Philadelphia, 1951.
5. CANNON, I. B.: "On the Social Frontier of Medicine." Harvard University Press, Cambridge, 1952.
6. "Widening Horizons in Medical Education. A Study of the Teaching of Social and Environmental Factors in Medicine." Report of Joint Committee of Association of American Medical Colleges and American Association of Medical Social Workers. Commonwealth Fund, New York, 1948.
7. RICE, E.; HISCOCK, I. V.: "Teaching the Social Component of Medicine," *Yale J. Biol. and Med.*, 11:645, 1939.
8. STONE, B. S.; BAKST, H. J.: "Educational Experience in Social Work and Medicine on a Domiciliary Medical Care Service," *The Social Service Review* 26:42, March 1952.

Student Participation and Supervision

CECIL G. SHEPS, WILLIAM L. FLEMING

THE DEEPENING INTEREST in extending the framework of medical service within which medical student experience and teaching can take place is demonstrated by the increasing number of medical schools which are adding a new dimension—extramural service—to their facilities and services. This change constitutes a radical departure from the well-established teaching techniques of the ward and outpatient department of the teaching hospital.

In general, the primary purpose of these programs is to help the student develop new insight and comprehension of the problems of his patients as people, and of the potentialities and responsibilities of his role as a physician.

Many types of programs have been developed to teach one or more aspects of comprehensive health care. Whether the experience is provided with a home care program, with family follow-up, a general practice clinic or a preceptorship with a general practitioner, the concepts formed by the student are shaped by the problems he encounters and the part he plays in dealing with these problems. The specific educational objectives of the diversely organized programs are not always the same. Success in achieving the objectives depends in large measure on the nature of the participation of the student in the program.

Dr. Shaps is director of program planning and research professor of health planning in the division of health affairs, and Dr. Fleming is professor of preventive medicine in the school of medicine, University of North Carolina.

There is all too little time in a four-year medical course to provide experience merely for the sake of experience—to enable the student to “learn the tricks of the trade.” A clear understanding of the specific educational objectives of student experience in the program is an essential prerequisite to any assessment of the type of participation the medical student is afforded in the program and the supervision he is given.

Participation

An attempt has been made to separate, identify and delineate the specific aspects or the components of the nature of the student's participation which would appear to affect significantly the experience he obtains. These factors may influence not only the substantive subject matter which he accumulates during his experience, but they also may affect the actual nature of the learning process in an important way.

1. **Population Served:** The type of population which the program serves may vary. Most frequently, the people served are the indigent and the medically indigent.

It seems fair to expect that in people from such widely different socio-economic strata in society, the student would encounter wide differences in the pattern of disease and in the reaction and attitudes thereto. The student may be gaining special insight into the social aspects of illness in a family, the early recognition of disease or the problems of

management of chronic disease. What he sees in a family dependent on public assistance for its financial support may be very different from what he sees in a middle-class, self-supporting family.

It has been noted by some clinicians that many patients who have long been socially and medically underprivileged do not know how to obtain and use the full range of modern health care services when these are made available to them. Thus, the student might be led into unfortunate error if he were to generalize widely on some of these matters from an experience which is representative of only a portion of the population.

The situation, even in completely self-supporting families, may be significantly different when comprehensive care is provided through a prepayment program than when there is no prepayment protection at all. This may be especially true with regard to preventive measures, routine examinations, the response to health education, etc.

The size of the population involved must be considered. The importance of this factor, of course, is related to the scope and purpose of service provided. If the purpose is to provide generalized domiciliary care for a wide variety of acute and chronic conditions, it becomes essential to have a population of sufficiently large numbers. On the other hand, if the purpose is to provide an intensive experience in purely advisory or in indirect care of a family or two, then the total population served can be quite small.

When the experience desired is that of an intensive study of one or two families, the selection of cases is made by the faculty responsible for the program. In programs which pro-

vide domiciliary medical care for a wide variety of conditions, the teachers may or may not select the cases.

2. Scope of Service Provided: The degree of *comprehensiveness* of the program is a vital element. The type and amount of care provided for the population served by the program may vary from a limited advisory service to medical care in the home for all acute and chronic conditions which can be treated effectively there. Such care may involve only medical care, or it may include dental service, laboratory service, bedside nursing care, social service, homemaker service, rehabilitation, etc. In addition, the program perhaps may include service in long-term institutions, and may provide opportunities for follow-up from and into the acute general hospital.

Thus, the facilities and services available help determine the range of health care within which the student obtains his experience. A program which aims to provide the extent of care determined by patients' medical needs is one which includes services in the home, the outpatient department, the hospital ward, or the ward in the chronic disease, nursing home or convalescent facility. It makes available, when needed, all types of ancillary services.

The degree of *coordination* is an essential consideration. The coordination of the various services, agencies and institutions is sometimes provided for by the use of a unit record system. Often, however, the records of the extramural service are quite separate from the hospital record. Coordination of services, which is so often considered desirable, sometimes is facilitated by streamlining the referral and admission procedures of the several inter-related agencies and institutions.

An important facet is whether the program provides *continuity* of observation and responsibility for the care of individuals or families. Care which is initiated for each episode at the patient's request does not offer the best opportunity for experience to help students learn about such matters as, for example, the patient as a whole or the natural history of disease.

3. Duration of Assignment: The importance of this depends again on the purpose of the participation. Some objectives can be obtained best if the student has a chance to follow his patient or family over a long period of time. Others, such as the diagnosis and treatment of a wide variety of acute diseases and medical emergencies in the home, can be obtained in a few weeks if the population covered is large enough.

4. Degree of Primary Responsibility for Providing Medical Care: The student may have primary responsibility for the initial contact, making the diagnosis and providing the subsequent treatment of the patient. On the other hand, he may spend most of his time observing a qualified physician perform these services.

5. Curricular Arrangements: Participation may be on a voluntary elective basis. This may be because it is not possible to make arrangements for all students or because the faculty does not believe that this experience is essential for all students. The participation may be arranged at the very beginning of the medical school experience, in the first year or at any time thereafter.

Supervision

Proper supervision is essential in any program of medical education to insure that patients get adequate

medical care and that students make the most of their opportunities to learn. In many types of intramural programs, organizational patterns of supervision have become well established. Extramural programs are newer and have more diversity in type of supervision. Because they exist outside the institution, they require relatively more in the way of supervision.

1. Supervisor-Student Relationship: This relationship varies even more than in intramural programs. In some programs students serve as assistants to their graduate physician supervisors. In other programs a deliberate attempt has been made to put as much responsibility as is safe on the student, with the supervisor serving as consultant.

With either extreme of supervisor-student relationship, the frequency of contact between student and supervisor may vary widely. Even in the programs which emphasize the responsibility of the student, the necessity of having easy accessibility to the supervisor and frequent student-supervisor contact is quite clear. However, there is still room for considerable difference in the frequency of contact.

2. Supervisor-Patient Relationship: This relationship is a cardinal point in extramural programs. One contribution these programs have made is the apparent demonstration of the great importance in the learning process of having the patient look to the student as his "physician." Under such conditions the student gets experience in the doctor-patient relationship and has a greater sense of responsibility. In other programs, for various reasons the patient considers the supervisor as his physician.

3. Level of Faculty Participation: Extramural programs vary widely in

regard to the level of faculty participation involved in supervision. The house staff level of younger physicians has been extensively employed because of the relatively large amount of supervisor time needed for home visiting and for ready accessibility and frequent contacts with students. Many programs have more experienced physicians participating in supervision and teaching because it is believed that more, rather than less, experience is required in the proper care of patients in their homes instead of hospitals. More experienced physicians also are thought to be more effective in encouraging students to consider patients on a broader basis in which social and environmental factors are given proper weight.

4. Involvement of Medical School and Hospital Departments: There is a good deal of variation in regard to the particular medical school or hospital department which is in charge of the extramural program. The two medical school departments which have most often taken the lead in establishing such programs are preventive medicine and internal medicine. Nevertheless, in some institutions a deliberate attempt has been made to cut across departmental lines and involve as many departments as possible. Most extramural programs lean very heavily on teaching hospital social service departments and some would be impossible without this relationship.

5. Incorporation into General Medical School Exercises: Established extramural programs vary widely in the extent to which they have been incorporated into general medical school exercises. Representing relatively new arrangements, and sometimes under the direction of departments which traditionally have

not had clinical responsibilities, such programs are sometimes set apart from other clinical teaching and clinical material. This separation may be regarded as undesirable because it interferes with proper integration of the program with other clinical activities, and interferes with student acceptance of a new program. In some institutions this separation has been avoided or lessened by associating the extramural program with patients discharged from hospital services, sharing staff on a rotation program or otherwise, and by making arrangements for presentation of interesting material from the extramural program in joint teaching exercises in the hospital.

6. Relations with Community Agencies: Since extramural programs are based in the community, and since one of the goals of such programs is usually to make students aware of the existence and function of community agencies, relationships between the program and such agencies are vital. In some instances the program or its service functions may represent a responsibility shared by the teaching hospital and a community agency.

Types of community agencies with which close relations are particularly necessary for service and teaching purposes are health departments, visiting nursing associations, welfare agencies and family societies.

7. Legal Requirements: A point which is frequently mentioned when establishment of extramural programs are being considered is the legality of using students to provide medical care to patients in their homes. It has been suggested that there is no essential difference between having the student participate in a medical care program in the home and in the hospital: in either

case he is presumably functioning as the agent of the licensed physician who is the student's supervisor and upon whom the ultimate responsibility for seeing that proper care is furnished rests. However, since the extramural program operates in the community and outside the sheltered walls of the teaching hospital, the issue of legality is more likely to be raised. There is no doubt that further legislation is the answer to this difficulty, but that it may be proper realization of the legal responsibility of student and supervisor.

Service Vs. Education

The issue sometimes is raised as to whether a particular program is primarily a service program or primarily an educational program. This point in classification would seem to be largely an artificial distinction. It is true that in an extramural program the service load might be so

heavy that a participating student might not receive adequate attention from supervisors, and the "brand" of medicine practiced might be too superficial.

On the other hand, if the program involves medical care, it certainly will have no real educational value unless service is provided. The important point to be stressed is whether supervision of the student is adequate.

It is true that another connotation implied in the service versus education distinction is that in the so-called "service" program, patient services may have to be limited by practical considerations. However, this point holds for most types of intra- and extramural teaching programs. While the degree of comprehensiveness of medical care may vary, the importance of adequate, competent, broad supervision of students in the program seems to be the major point.

Appendix

IN JUNE 1952, a group of individuals actively engaged in extramural medical services and a number of those seriously considering the institution of such programs met at the New York Hospital. While much of the discussion material is included in the papers published in this symposium, it was felt that descriptive outlines of the various active programs which were represented at this meeting should be included.

The use of a home care program as a teaching modality began in 1875. From an administrative point of view, direct organizational responsibility is centered in departments of medicine in three of the nine programs which

are described, and in departments of preventive medicine in three instances. Departments of medicine are primarily or jointly involved in eight programs, departments of preventive medicine in six, pediatrics in six, psychiatry in five, and obstetrics in two. Social service participates as an integral part of the organization in seven programs.

Without exception, all the service programs operate at the fourth-year level and, with the exception of New York University, provide service for indigent and medically indigent population groups. New York University, by its association with the Health Insurance Plan of Greater

New York, deals with a prepaid medical care insurance group.

Throughout all of these programs, there is an expressed desire to introduce into the curriculum a carefully supervised educational experience in medical practice. This involves the development of a sense of appreciation of the responsibility of the physician to be properly qualified to provide a service which meets the needs of the patient.

Emphasis on a broad understanding of human needs is an essential ingredient of these educational facilities. There seems to be general

agreement that this provides an experience which cannot be duplicated without making the patient the central focus of concern. The significance of the development of a sense of responsibility for the prevention and control of disease also is stressed. The need for comprehensive understanding of the patient in relation to his background, his social and environmental circumstances, and the role of the doctor-patient relationship in clinical management seems to be a central objective.

Outlines of 11 home care programs follow:

SCHOOL—BOSTON UNIVERSITY—(A) HOME MEDICAL SERVICE

Date of origin—1875.

Administration—Department of preventive medicine and Massachusetts Memorial Hospitals.

Service scope—Total except for emergencies and obstetrics.

Type of patient—Indigent and medically indigent.

Student level—Fourth year.

Length of assignment—One month.

Student participation—Initial and continued contact with patient for diagnosis and treatment.

Student supervision—Two full-time second-year residents, one instructor in medicine, one psychiatrist and the director with consultation services as required.

Continuity—Maintained in OPD through home medical service residents. Students visit hospitalized patients periodically.

Average patient load—5,500 annually.

Average home visits—3.0 visits per patient per year.

Purpose—Education and service.

Integrated departments—Medicine, psychiatry, pediatrics, social service, preventive medicine.

Records—Chronological, separate from hospital records.

SCHOOL—BOSTON UNIVERSITY—(B) HOME CARE PROGRAM

Date of origin—1949.

Administration—Department of preventive medicine.

Service scope—Total except for emergencies and obstetrics.

Type of patient—Indigent and medically indigent.

Student level—Third year.

Length of assignment—Extra-curricular for one year.

Student participation—Initial and continued contact with patient for home management for nine months.

Student supervision—Two part-time physicians on faculty of department of preventive medicine and staff of Massachusetts Memorial Hospitals.

Continuity—Continuous observation for nine months.

Average patient load—One family.

Average home visits—15.

Purpose—Education and service.

Integrated departments—Medicine, psychiatry, pediatrics, social service, preventive medicine.

Records—Chronological, separate from hospital record.

SCHOOL—CORNELL MEDICAL COLLEGE (A)

Date of origin—1952.

Administration—Advisory committee appointed by joint administrative board, New York Hospital-Cornell Medical Center.

Service scope—Complete for selected patients.

Type of patient—Indigent and medically indigent.

Student level—Fourth year.

Length of assignment—22½ weeks.

Student participation—Initial and continued contact for diagnosis and treatment of selected patients originating from comprehensive medical care clinic.

Student supervision—Staff of comprehensive medical care program and of general medical and general pediatric clinics.

Average patient load—Now 74 comprehensive care families.

Average home visits—Two per week at present.

Purpose—Education and service.

Integrated departments—Medicine, psychiatry, pediatrics, social service, preventive medicine, surgery, obstetrics and gynecology.

Records—Hospital record. Unit record system used.

SCHOOL—CORNELL MEDICAL COLLEGE (B)

Date of origin—1940.

Administration—Department of preventive medicine.

Service scope—Complete for selected patients.

Type of patient—Indigent and medically indigent.

Student level—Third year.

Length of assignment—One year.

Student participation—Continued contact with one family for a year as advisor on health and medical social problems.

Student supervision—Two preceptors, one from the department of preventive medicine, one from social service.

Average patient load—Now 57 families.

Average home visits—Two/month/student.

Purpose—Education and service.

Integrated departments—Preventive medicine, social service.

Records—Student records—log and final report.

SCHOOL—MEDICAL COLLEGE OF GEORGIA

Date of origin—1925 (general medicine and surgery).

Administration—Department of medicine.

Service scope—Total with 24-hour service.

Type of patient—Indigent and medically indigent.

Student level—Fourth year.

Length of assignment—Three weeks (seven students assigned for each period).

Student participation—Initial and continued contact for diagnosis and treatment. Diagnosis and treatment are under supervision of resident.

Student supervision—Rotation of residents in medicine.

Continuity—Service limited to home care (students follow patient if hospitalization becomes necessary).

Average patient load—12 (20 new patients per day).

Average home visits—Three to five visits per day per student—this includes revisits.

Purpose—Education and service.

Integrated departments—Other departments available for consultation relative to home care service.

Records—Chronological, not part of hospital record.

SCHOOL—MEDICAL COLLEGE OF VIRGINIA

Date of origin—July 1949.

Administration—Department of public health and department of medicine, Medical College of Virginia.

Service scope—Total.

Type of patient—Indigent and medically indigent.

Student level—Fourth year.

Length of assignment—Three weeks.

Student participation—Initial and continued contact with patients for diagnosis and treatment. Two-three weekly seminars for discussion of patient problems: medical, economic and sociologic.

Student supervision—Three members of staff from the department of medicine, a junior assistant resident from the department of medicine who is on this service for six weeks as a part of one year's rotation through the various medical services, and a junior assistant resident on pediatrics, who is on this service for two months, visiting alone or with the students the pediatric patients in the afternoon and attending the pediatric outpatient clinic in the morning where he or she can see the patients they have sent in from the home. This pediatric resident's work is supervised and reviewed by a member of the department of pediatrics.

Continuity—All patients are followed through the clinics and hospitals by direct contact, record reviews, or weekly ward rounds on admitted patients.

Average patient load—3,200 patients annually.

Average home visits—3.0 visits per patient per year.

Purpose—Service and education.

Integrated departments—Medicine, pediatrics, preventive medicine, social service, department of public health.

Records—Brief chronological, kept separate from the hospital record.

SCHOOL—NEW YORK UNIVERSITY—BELLEVUE MEDICAL CENTER

Date of origin—1947.

Administration—The medical group of the New York University Bellevue Medical Center.

Service scope—Complete except psychiatry and tuberculosis.

Type of patient—Private prepaid medical care.

Student level—Fourth year.

Length of assignment—Five months, two sessions weekly, three hours each.

Student participation—Observation initially with increasing degree of participation.

Student supervision—Group physician, an internist or pediatrician who is a faculty member of the medical school.

Continuity—Only for a period of assignment in group.

Purpose—Service, education and exploration of techniques of utilizing a nonmedically-indigent population in a teaching program.

Patient load—7,500.

Number of patient visits per year—32,000.

Average home visits—About 10 per cent of professional services.

Integrated departments—All medical and surgical specialties including psychiatric consultation (not psychotherapy).

Records—Individual patient records.

SCHOOL—UNIVERSITY OF PENNSYLVANIA

Date of origin—1949.

Administration—Department of preventive medicine, psychiatry and department of public health.

Service scope—None, students act as medical advisors.

Type of patient—Low income families.

Length of assignment—Extra curricular, four years.

Student participation—Limited and for the most part advisory.

Symposium on Extramural Facilities

- Student supervision—Representatives of departments of preventive medicine, medicine, psychiatry, pediatrics, obstetrics and social service.
Continuity—Students attempt to follow patients through various medical care services for four years.
Average patient load—One family averaging five-six members.
Average home visits—One-two visits monthly for four years.
Purpose—Education.
Integrated departments—Preventive medicine, psychiatry, surgery, social service, obstetrics, pediatrics.
Records—Individual family records.

SCHOOL—UNIVERSITY OF TENNESSEE COLLEGE OF MEDICINE

- Date of origin—1952.
Administration—Division of preventive medicine, general practice clinic.
Service scope—Comprehensive (ambulatory, home and hospital) to selected families only.
Type of patient—Indigent.
Students level—Final four quarters. Curriculum consists of 12 quarters.
Length of assignment—One year to a family group.
Student participation—The family of a patient examined by the student in the medicine outpatient department during the eighth quarter is selected by him. Subsequently he serves as "family physician," actually providing medical care or advice. The general practice clinic serves as "office" for ambulatory care.
Student supervision—General practitioners who constitute the staff of the general practice clinic serve as preceptors, both for the intramural and extramural aspects of the program.
Continuity—Maintained through continuous responsibility for meeting total health needs of family for period of one year.
Average patient load—A single family, preferably including a patient with chronic disease and two or more children.
Average home visits—Too early for adequate tabulation, but probably two-three per month.
Purpose—Education primarily. Service for its demonstration value only.
Integrated departments—Medicine, psychiatry, pediatrics and preventive medicine participate in family care conferences, in which student activities in this program are discussed.
Records—A family folder is kept by each student for his family. This summarizes all services to the family, and is used as basis for conference discussions. This is not incorporated into the hospital record.

SCHOOL—TUFTS MEDICAL COLLEGE

- Date of origin—1796 (undergraduate teaching 1929).
Administration—Department of medicine and Boston Dispensary.
Service scope—Total except for emergencies and obstetrics.
Type of patient—Indigent and medically indigent.
Student level—Fourth year.
Length of assignment—One month.
Student participation—Patients assigned to students by preceptors for diagnosis and treatment.
Student supervision—District service residents who receive appointments as assistants in medicine at Tufts College Medical School under the direction of the director of domiciliary medical programs.
Continuity—In home for period of assignment only.
Average student-patient load—572 patients per month.
Average home visits—57 patients per student per month.
Purpose—Education and service.
Integrated departments—Medicine, social service.
Records—Chronological, not part of hospital record.

SCHOOL—UNIVERSITY OF VERMONT

Date of origin—1930.

Administration—Department of medicine.

Service scope—Medical care by house calls; diagnosis and treatment.

Type of patient—Medically indigent.

Student level—Fourth year.

Length of assignment—One month.

Student participation—All seniors take this service. Initial call and work-up with instructor present.

Student supervision—Immediate supervisor is second-year medical resident on 24-hour duty.

Follow-up calls may be made by students alone.

Continuity—This service follows clinical clerkships of the junior year and it is a rotating service in the senior schedule. Patient referred and followed to OPD for specialist consultation. Case followed in hospital and after return home. Medical director in charge of program also has been in charge of OPD (where patients receive office care) for the past 10 years.

Average patient load—7,212.

Average home visits—Four/patient (200/student).

Purpose—Service.

Integrated departments—Medicine, 1,533*; surgery, 722*; pediatrics, 624*; psychiatry, 1,253*.

Records—Individual, chronological.

*Number of office visits by people under home care plan.

Editorials and Comments

Home Care Programs

WHAT IS THE significance of the growing interest in home care programs among our medical schools? There are those who fear that such courses place too much emphasis on the practicalities of home care at the expense of precious time which might be devoted to essential training in the basic medical sciences.

It is difficult to generalize about the existing home care programs because there are so many individual variations among them. It may be said, however, that they have one main objective in common: to give the future practitioner a more realistic understanding of the problems of diagnosis and patient care than is obtainable when attention is concentrated chiefly on factors that are measurable in quantitative terms.

It is obvious that the trend toward the new programs is in a direction away from the conception of disease as a purely physicochemical phenomenon. Without minimizing in the least the vital and growing importance of the exact sciences in the medical curriculum, there is an apparent need for a more holistic approach to the problem of man and his ills.

Recognition of this need is reflected in a considerable number of curricular innovations of which the home care programs are simply one example. They indicate a shift in point of view which may be a

turning point in medical education comparable to the change in orientation from morphology to function at the turn of the century.—
JAMES M. FAULKNER, symposium editor.

Full-Time Clinical Teachers

MEDICINE HAS OFTEN been pointed out as the most fortunate of professions for the reason that it has long been its tradition that its most illustrious practitioners are so often also its most effective teachers.

Medical college administrators are mindful of this fact and duly appreciative of the personal sacrifices that hundreds of our top-flight clinicians make in order to fulfill their teaching obligations. They are, however, also painfully aware of the equally important fact that any department, whether it be basic science or clinical, that has to get along without a full-time head is almost certain to suffer through lack of continuity and long-term planning of its teaching and research program.

The dilemma in the clinical department, therefore, is not one that is easily dealt with either by a simple principle or a single formula. We want first-class clinicians, who command the unquestioned respect of their peers, to head our clinical departments; we want them to continue to be first-class clinicians and be able to perform as such; yet we want them to give their major

thought and energies to developing the teaching and research programs of their department.

Providing complete full-time salaries for these select clinical department heads and limiting their practice to the school's teaching hospitals is beyond the financial reach of most of our medical schools. This scheme also has the disadvantage of denying the services of these outstanding clinicians to persons in the community who perhaps need their services and can afford to pay well for them, but find they are available only to patients in the school's teaching hospitals.

A more commonly used plan is to provide a basic salary in five figures and then permit the clinical teacher to supplement his basic salary by earnings from consultation work and referred practice within the school's teaching hospitals. If he is primarily interested in his teaching and research, this plan will often prove very satisfactory to the school. If, however, the practice responsibilities are permitted to become heavier and heavier, the so-called "geographic full-time" arrangement in that instance has little to offer over frank part-time or voluntary arrangement. If, as has occurred at times, the clinician uses his teaching position to build up a large practice of consultation and referred work to the detriment of the voluntary members of his own staff and other clinicians in the community, he becomes not only ineffective as head of his department but also a public relations problem for the whole school.

The tendency to establish limita-

tions upon the outside practice of "geographic full-time" teachers is apparently growing and has much in its favor. To provide a basic salary in five figures and then limit the earned supplement to a stated percentage of that basic salary, or to limit the time to be devoted to practice to one-sixth time, may help to assure the local practitioners that the full-time position will not be used to give the incumbent unfair practice advantages. It also may serve as some assurance that the clinician will in fact be devoting his major thought and energy to the departmental teaching and research.

Better yet are the limitations which the clinical teacher himself sets to protect his teaching and research time. These include a variety of devices such as limitation to certain geographic areas, limitation to certain definite types of illness, limitation to strict consultation and not including any referred practice cases and the like.

The need for clinical teachers who can devote the major part of their time and energy to developing the teaching and research program of their department is generally recognized, and the number of such teachers is being rapidly increased. To evolve a plan that will compensate these teachers adequately and yet protect their time for their academic duties and do it with the understanding and support of the basic science staff, the voluntary clinical teaching staff and the local practicing physicians, is a task that is a challenge to even the best of our medical college deans.

NEWS DIGEST

AAMC Executive Council

Activities for the Association of American Medical Colleges during 1953-54 were discussed at a meeting of the Executive Council in New York City, May 29-30.

A general reduction in budget was made in an effort to define the core activities of the Association and establish a basic budget which can be maintained by AAMC activities. Budget figures approved are: \$62,840 for general operations; \$80,000 for the Committee on Student Personnel Practices; \$56,000 for the Journal of Medical Education; \$25,000 for the Medical Audio-Visual Institute.

Future plans of the MAVI were discussed and it was decided to shift the emphasis from film evaluation, production and experimentation to the distribution and utilization of all kinds of audiovisual materials.

Financing of individual medical schools was considered in a report from the chairman of the Committee on Financial Aid to Medical Education. A questionnaire has been prepared to go to the medical schools to determine the amount of funds needed so that fund-raising groups may have concrete facts. Copies of Senate Bill 1153 have been sent to medical college deans so that they may study it and be prepared to give their opinion of it.

Final plans were made for the 64th annual meeting of the Association, to be held in Atlantic City October 26-28. Dr. Dean F. Smiley, secretary, was instructed to make revisions in the Constitution and By-Laws to be considered at that time.

The Committee on Public Information was authorized to assume responsibility for publicity and press relations at the meeting and to invite the National Fund for Medical Education to designate a member of its staff to sit with the committee

in the capacity of an ex-officio member.

Council Chairman Joseph C. Hinsey, President Ward Darley and George Packer Berry, immediate past president, were named as a committee to consider the financing of the 1954 Teaching Institute on Pathology, Microbiology, Immunology and Genetics.

The Liaison Committee on Medical Education reported a meeting with representatives of the Middle States Association of Colleges and Secondary Schools on May 28, to discuss a cooperative program. It is expected that cooperating plans may be established eventually with other or all of the other six regional accrediting agencies.

Reports were made of inspections of the following medical schools: University of California at Los Angeles, University of Alabama, University of Miami, University of Puerto Rico, Creighton University, Chicago Medical School, Medical College of Virginia, New York Medical College, Down-State Medical School of the State University of New York, University of Western Ontario, University of Ottawa, University of Saskatchewan, College of Medical Evangelists.

The AAMC will participate with representatives of the Council of Medical Education and Hospitals of the AMA on a survey of Irish medical schools, August 30-September 5.

Establish New Institute

Study of some basic problems of evolution and the training of research experts to advance work in this field are functions of a new Institute of Human Variations established at Columbia University.

The institute is utilizing services of outstanding university specialists in the fields of genetics, zoology, an-

thropology, pediatrics, psychology, serology, mathematical statistics, and foreign experts from Great Britain, India and Australia. Within the university the institute personnel is drawn from the faculties of pure science, political science and medicine.

Recent advances in anthropology and in the biological and medical sciences, genetics and mathematical statistics are being used by the institute as research tools to study three main areas in evolution. They are: the factors concerned in variations in physique; the serological and physical variations which occur within groups and between groups; and the physiological and chemical variations among human beings.

The full title of the institute is the Institute for the Study of Human Variations and for Research on the Biological Factors Causing Evolutionary Changes in Populations.

Doctor Draft To Be Extended

The doctor-draft law is to be extended until 1955 with certain minor changes. The bill contains a provision for continuing the \$100 per month special pay to physicians and dentists who are commissioned officers. Men with 21 months of prior service are exempted and a sliding scale for length of service has been set up depending on former service time.

Of the more than 13,500 physicians and medical specialists called into military service under the law since 1950, less than 50 have been drafted or inducted. Others have received officers' commissions.

Radio Round Table

Four medical educators participated in the 1001th University of Chicago Round Table of the Air on May 31. Subject of the round table, which originated at NBC in New York City, was "How Can Medical Education Be Better Financed?"

Participants were Dr. Lowell T. Coggeshall, dean of the University of Chicago Division of Biological

Sciences; Dr. Joseph C. Hinsey, dean of Cornell University Medical College; Dr. Vernon Lippard, dean of Yale University School of Medicine; Dr. Franklin Murphy, chancellor of the University of Kansas.

Reprints of the round table may be obtained from the secretary's office, Association of American Medical Colleges, 185 N. Wabash Ave., Chicago 1. The pamphlets also contain a shortened version of the article by Dr. Hinsey, "Problems of Medical Education," which appeared in the June 1953 issue of *MEDICAL EDUCATION*.

Physician Population Up

The number of physicians at the end of 1952—214,667—is the largest ever recorded in the United States, according to the 51st annual medical licensure report of the Council on Medical Education and Hospitals of the AMA. An increase of 2,987 physicians over 1951 was noted.

Of the total number, 151,363 were engaged in private practice, 6,677 were in full-time research and teaching, 28,366 were interns, residents and physicians working as hospital administrators, 8,166 were retired or not in practice and 20,095 were in government service.

California was first in the number of licenses issued—1,581. New York licensed 1,292 physicians and more than 500 licenses were issued in Florida, Illinois, Ohio, Pennsylvania and Texas.

The report reveals that 97.3 per cent of graduates of approved U. S. medical schools were successful in passing state licensure examinations. In comparison, 93 per cent of Canadian graduates passed state examinations and only 53.7 per cent of those from foreign medical schools were successful candidates.

Texas Rural Doctor Program

In an effort to get more young doctors into rural practice, Texas has adopted a constitutional amendment authorizing state aid for students

who agree to practice for a stated length of time in a rural area. Opposition to the plan is delaying action and no funds have yet been provided to finance the program.

Chief objections posed by some legislators are: the program is a step toward socialized medicine; there is doubt that a doctor could be legally compelled to practice where he didn't want to; there is doubt that there is a country doctor problem. A physician - redistribution plan which helps doctors locate new areas in which to practice, and a preceptorship system, both sponsored by the Texas Medical Association, are considered by many to be solving the problem.

Call for New Jersey Medical School

Dr. Henry B. Decker, president of the Medical Society of New Jersey, called for a medical school in New Jersey to make certain that the state has an adequate number of medical practitioners. In his inaugural address, he noted, "We are all convinced that New Jersey needs at least one medical school."

On behalf of the society, Dr. Harold A. Murray, the retiring president, presented a check for \$25,000 to the American Medical Education Foundation. He said the check was to be distributed among the 38 medical schools throughout the country that educate New Jersey medical students.

Fellowships, Grants, Awards

Lowell M. Palmer Fellowships

Recipients of the first six awards under the Lowell M. Palmer Senior Fellowships in the Medical Sciences, which total \$88,000, have been announced by Dr. Walsh McDermott and Dr. Geoffrey Rake, chairman and vice chairman of the selection board. Fellowships carry a two-year tenure. They are designed to provide substantial support for young medical teachers and research scientists of exceptional ability who have completed postdoctorate fellowships and deserve additional assistance in order to remain in full-time academic medicine.

Recipients are: Dr. Joseph Dancis, department of pediatrics and obstetrics, New York University College of Medicine; Dr. Franklin W. Heggeness, department of physiology, University of Rochester; Dr. Charles A. LeMaistre, department of medicine, Cornell University; Dr. William R. Milnor, internal medicine, Johns Hopkins; Dr. David Karzon, department of pediatrics, University of Buffalo; Dr. Maurice S. Raben, department of research medicine, Tufts College.

Fulbright Competition

Announcement has been made of the 1954-55 competition for Fulbright awards for university lecturing and postdoctoral research in Europe and the Near East, Japan and Pakistan. Applications must be made no later than October 15, 1953. Application forms and additional information may be obtained from the Conference Board of Associated Research Councils, Committee on International Exchange of Persons, 2101 Constitution Ave., Washington 25, D. C.

Ciba Award

A husband and wife team of scientists were recipients of the Ciba Award for distinguished research in endocrinology for 1953. They are Dr. Sidney Roberts, associate professor of physiological chemistry, University of California (L.A.), and his wife, Dr. Clara Marion Szego, assistant professor of zoology.

Their contributions fall into three main groups: first, studies which demonstrate that dietary habits of animals not only modify the capacity of tissues to utilize foodstuffs, but also the response to such hormones as

insulin; second, studies demonstrating that practically all the circulating estrogen is combined with a lipoprotein from which it is readily separated by simple diffusion, but which is the agent transporting the estrogen; and studies showing the effect of the adrenal cortical and other hormones on serum proteins released by the liver and spleen.

The Ciba Award is made annually through the Endocrine Society by Ciba Pharmaceutical Products, Inc., and is in the amount of \$1,800.

Schering Award

Deans of five medical schools have

selected outstanding papers from their institutions, and the students who submitted them will receive special Dean's Awards from the Schering Award Committee. These prizes, of \$100 each, are the latest to be added in order to widen recognition among the increasing number of participants in the nationwide competition. Deans of schools with the most participants are invited to make the selections for the preliminary awards. Schools are: Meharry, University of Louisville, Kansas University, College of Medical Evangelists, and New York University's Bellevue Medical Center.

Meetings

AMA Annual Meeting

An estimated 18,000 physicians and 24,000 residents, interns, nurses, medical technicians, students and guests attended the 102nd annual meeting of the American Medical Association in New York City, June 1-5. Facilities of seven hotels, Town Hall and Grand Central Palace exhibition hall were used for the meeting, the largest in AMA history. Medical care of the future was the general meeting topic.

Dr. Edward J. McCormick, Toledo, was installed as 107th president of the association. In his inaugural address he praised the expenditure of nearly a quarter billion dollars for expansion of medical schools in the past three years. Doctors, he said, gave more than \$3 million last year to support medical education.

Dr. Walter B. Martin of Norfolk, Va., was named president-elect to head the organization in 1954.

The 1953 Distinguished Service Award was voted to Dr. Alfred Blalock for his outstanding work in vascular surgery and his part in the development of the "blue baby" operation. Dr. Blalock, professor of surgery at Johns Hopkins University

School of Medicine and chief surgeon at Johns Hopkins Hospital, received the award during ceremonies preceding the presidential inauguration Thursday night, June 2.

The gold medal for exhibits of clinical research, particularly in improved methods of clinical teaching, went to Dr. J. Scott Butterworth, Dr. Charles A. Poindexter and Dr. C. E. Peterson, of New York University Post-Graduate Medical School, for their improvement of the fluoroscopic diagnosis in heart disease by allowing students to visualize normal and pathological heart models in various positions. A report on their work appeared in the July 1952 issue of *MEDICAL EDUCATION*.

More than 400 scientific and clinical reports were heard at the meeting and there were some 270 scientific and 375 technical exhibits.

New at the 1953 meeting was medical color television projected for the first time on large screens. Telecasts of medical and operative clinics, transmitted over a closed circuit from New York Hospital, were received at the Roosevelt Hotel. Outstanding specialists participated.

The AMA House of Delegates took

important policy actions on veterans' medical care, medical ethics, osteopathy, intern training and a variety of other subjects pertaining to health care. They recommended: discontinuing treatment of nonservice-connected disabilities except in cases involving tuberculosis or psychiatric or neurological disorders; deferring action on the report of the Committee for the Study of Relations Between Osteopathy and Medicine; abolition of the rule whereby approval may be withdrawn from an internship program which for two consecutive years fails to obtain at least two-thirds of its slated number of interns; an outline of a nine-point pro-

gram for further improvement in the nation's medical care.

Mrs. Oveta Culp Hobby, secretary of the Department of Health, Education and Welfare, was present at the meeting and stated that she agreed with outgoing AMA president Dr. Louis H. Bauer, that "too many physicians are indulging in wishful thinking that the clock can be turned back and that we can again practice medicine as it was practiced 25 years ago, without involvement in all these socio-economic problems.

"The administration," she said, "is looking, first, to the physicians of the country for leadership in meeting this challenge."

College Briefs

Boston University

Honorary degrees have been awarded to the national president of the National League for Nursing and to the director of the National Institute of Mental Health. RUTH SLEEPER was awarded the degree of Doctor of Humanities for her services in the improvement of nursing education and service. ROBERT HANNA FELIX was made an honorary Doctor of Science for his work in the prevention, cause and treatment of mental disorders and the promotion of mental health.

A check for \$1,200 was presented by GEORGE W. MANNION, president of the United Cerebral Palsy Association of Massachusetts, to underwrite the first workshop in New England for training graduate teachers who will work with children handicapped by cerebral palsy.

University of Cincinnati

Dr. MILTON ROSENBAUM, professor of psychiatry, has gone to Israel as the first visiting professor of psychiatry at the Hebrew University-Hadassah Medical School in Jerusa-

lem. He will remain three or four months to assist in establishing a new department of psychiatry in the Israeli medical school. He will integrate clinical resources of four hospitals and clinics into the teaching program of the new department. The Hebrew University-Hadassah Medical School is an integral part of a projected \$10 million medical center in Jerusalem. The special assignment was made possible by a \$150,000 grant from the Julius and Marie Schneider Memorial Fund for Neuropsychiatry.

Columbia University

Alumni and faculty of the School of Public Health took part in ceremonies dedicating a plaque in the school library at the Columbia-Presbyterian Medical Center to the late Dr. CLAUDE W. MUNGER, professor of hospital administration until 1950. The ceremony was held in conjunction with the annual reunion.

Dr. JOSEPH J. McDONALD, professor of surgery, has been appointed dean of the medical school of the American University of Beirut, Lebanon. He

succeeds Dr. NORMAN B. NELSON, the new dean at Iowa. Dr. McDonald formerly was associated with the American University for four years, beginning in 1946.

Cornell University

Establishment of the Griffis Medical College Library Fund, endowed by STANTON GRIFFIS of New York and members of his family, was announced recently. Income from the \$75,000 fund will be used to purchase books, periodicals and other publications for the medical college.

The state board of social welfare has approved a mental health cooperative and training program which provides for the use of the services of senior students and residents in the five state mental hospitals. About 15 students will have five and one-half weeks duty in state hospitals on a rotation basis.

Chicago Medical School

More than \$78,000 in new and renewed grants for research have been awarded recently. Dr. HANS ELIAS, department of anatomy, has received a new grant of \$11,600 for two years from the National Cancer Institute for studies on morphology of carcinoma of the liver; Dr. BEN B. BLIVAIS, department of physiology and pharmacology, and his collaborators have received a new grant of \$6,192 from the National Cancer Institute for studies on the mechanism of experimental induction of testicular tumors in mice; Dr. ALDO A. LUISADA, department of medicine, has received a grant of \$9,700 from the Chicago Heart Association for studies of heart sounds and murmurs in normal children.

The faculty wives have presented a check for \$8,000 to the school, proceeds of the Artur Rubinstein benefit recital.

University of Colorado

Graduates of Colorado medical schools who have practiced medicine for 50 years or more were honored

June 5 by "Awards in Recognition." Twenty Colorado doctors were honored.

Creighton University

Dr. J. RAYMOND JOHNSON has been appointed professor of physiology and pharmacology and head of the department.

Duke University

A new Medical Town Hall for the people of Durham and the state was inaugurated June 7 with a session on polio. A panel of Duke medical authorities explained in simple terms what polio is, how its victims are affected, what medicine can do to reduce the crippling effects and what medical science is doing to stop the disease. Panel members were Dean W. C. DAVISON, Dr. SAMUEL P. MARTIN, assistant professor of medicine, and Dr. J. LEONARD GOLDNER, assistant professor of orthopedics. Admission to the series is free to all interested persons. Topics scheduled for later programs were civil defense and atomic radiation, blue babies, newest control and treatment of tuberculosis, development of children with hearing problems, viruses and blood banks.

The 1953 postgraduate course for doctors from throughout the southeast was held June 22-25. Designed for the general practitioner, this year's program included a special two-day session on anesthesia. Other topics included advances in treatment of allergies, management of head injuries, diagnosis of liver diseases and a roundup of medical advances.

Dr. FRANK L. ENGEL, associate professor of medicine, recently was elected to the Association of American Physicians. Dr. Engel is one of 13 physicians from throughout the United States elected to the association, which has a limited membership of 200. He has been engaged in cancer research since joining the Duke medical staff in 1947 and recently received an American Cancer Society award for continuation of his work.

The third annual course in acarology, the study of ticks and mites, was offered June 10-29 under the direction of Dr. GEORGE W. WHARTON, associate professor of zoology. The course was the first of its kind ever offered when it was introduced in 1951.

Harvard University

Dr. REGINALD FITZ, assistant dean, died May 27 in Brookline, Mass. Dr.



Fitz had served as assistant dean since 1947. He was associate professor of medicine for 14 years and had been a lecturer in the history of medicine since 1936.

A graduate of Harvard (M.D., 1909), Dr. Fitz served as a professor of medicine at the University of Minnesota, then returned to Harvard from 1922 to 1936 as associate professor of medicine. In 1936-39 he was Wade Professor of Medicine at Boston University, then returned to Harvard. His important contributions to medical education include 21 years as a member of the American Medical Association's Council on Medical Education and Hospitals.

Howard University

The Office of Naval Research has awarded a subsistence grant to Dr. MADISON S. BRISCOE, assistant professor in the department of bacteriology, preventive medicine and public health. He will collaborate on studies in Egypt and the Anglo-Egyptian Sudan throughout the summer. He has been assigned to the divisions of medical entomology and parasitology and will study the role of arthropods in the transmission of diseases in the Middle East. This is Dr. Briscoe's second trip to Africa. During World War II, he was commanding officer of the 16th Malaria Survey Detachment stationed in Liberia.

University of Kansas

Dr. VERNON E. WILSON will join the faculty September 1 as assistant dean in charge of student affairs. He also will serve as assistant professor in the department of pharmacology.

The first cerebral palsy workshop here was held June 7-20 in cooperation with the Kansas Society for Crippled Children and Adults and the National Society for Crippled Children and Adults. A selected group of patients and staff members from the departments of orthopedic surgery, pediatrics, physical therapy, hearing and speech correction and social service participated.

Dr. CHESTERFIELD G. GUNN JR., resident in medicine, has been awarded an appointment as research fellow of the American College of Physicians for one year because of the potential merit of his proposed research on experimental hypertension. Effective July 1, the award carries a stipend of \$3,500 for personal expenses.

Drs. E. GREY DIMOND, KURT REISSMANN and TOM HAMILTON have received a \$34,500 research grant from the National Heart Institute for research over three years in the field of experimental pulmonary hypertension.

University of Minnesota

The OWEN H. WANGENSTEEN Surgical Education Foundation, honoring the chief of the department of surgery, has been established. Initial funds to set up the foundation were donated by Dr. F. JOHN LEWIS, associate professor of surgery, Dr. RICHARD L. VARCO, professor of surgery and Dr. CHARLES E. REA, clinical associate professor of surgery. Purpose of the foundation is to promote advanced surgical education. Dr. Wangenstein will act as an adviser in administration of the funds.

Dr. BERNARD ZIMMERMANN, research fellow in the department of surgery and cancer coordinator for the medical school, has been awarded a three-year grant by the American Cancer Society. The \$18,000 grant

will be used to carry out studies of endocrine physiology and metabolic balance in relation to cancer and cancer surgery.

New York Medical College

Dr. RALPH E. SNYDER, assistant dean since 1951, has been appointed executive dean. He will succeed Dr. J. A. W. HETRICK, who has been dean since 1941 and president since 1942. Dr. Hetrick will continue as president. Dr. Snyder received his M.D. from New York Medical College.



During the 12 years Dr. Hetrick served as dean, many changes have been made in the college. Under his administration the faculty has been enlarged from 353 members to 950 and the student body has grown from 319 students to an enrollment of nearly 500. He introduced the plan of having leading hospitals in the area affiliate with the college for teaching purposes.

New York University (Bellevue Medical Center)

Mrs. ELIZABETH SHOUMATOFF GRIF-FIN has been appointed director of the newly organized office of development and public relations, which will endeavor to raise funds in support of the medical center's annual operating program and capital funds to complete the \$28,500,000 building program now under construction.

The retirement of Dr. HENRY E. MELENEY, Hermann M. Briggs Professor of Preventive Medicine, has been announced. He assumed his present position in 1941. He also has been director of the preventive medicine service at the medical center's university hospital and associate visiting physician at Bellevue Hospital. Dr. Meleney has joined the School of Medicine of Louisiana State Univer-

sity as professor of research in medicine, effective July 1.

University of North Dakota

The National Institutes of Health has granted \$6,000 to Dr. H. E. EDERSTROM, department of physiology, for study of temperature regulation in animals.

Ohio State University

Dedication of the cancer research laboratories was held May 8-9, with a cancer symposium and formal exercises. The laboratories were financed by a grant from the National Institutes of Health plus matching funds from the state legislature and a gift from the Sloan-Kettering Foundation.

The second year of a project to interest medical graduates in the practice of medicine in rural Ohio was concluded recently. Sponsored by the Committee on Rural Health of the Ohio State Medical Association in cooperation with the medical school, the Senior Class Cabinet and the Student AMA, the project involved a series of five lectures to acquaint senior medical students and their wives with general medicine as it is practiced in rural areas and small towns.

University of Oregon

Dr. PAUL G. HAFNER has resigned as director of the Crippled Children's Division to enter private practice in Vancouver, Wash. He had held the post since 1946. He retains the academic rank of clinical instructor in orthopedic surgery. Dr. RICHARD L. SLEETER is to assume his former duties on July 1. Dr. Sleeter's academic rank will be assistant professor of pediatrics.

Dr. KENNETH C. SWAN, professor and head of the department of ophthalmology, received a national award in the field of eye research at the annual meeting of the Association for Research in Ophthalmology, held in New York in conjunction with the AMA meeting. Dr. Swan was presented with the Proctor medal as a result of nearly 20 years of research

in several fields of ophthalmology: the study of drugs and their effects on diseases of the eye, the study of the basic physiology of ocular movements and abnormalities of coordination, and research into the causes and prevention of blindness.

Recent gifts and grants include \$8,375 from the Oregon Heart Association for the establishment of the Maybelle M. Dant Equipment Fund and \$11,000 from the Helen Hay Whitney Foundation as the second installment of a three-year grant to support work under the direction of Dr. ROBERT ALDRICH of the pediatrics department.

University of Pennsylvania

After 22 consecutive years as chairman of the department of psychiatry, Dr. EDWARD A. STRECKER became emeritus professor of psychiatry on July 1. He continues as a member of the faculty of the university's graduate school of medicine. The new arrangement will give Dr. Strecker more time for his governmental activities, as well as his writing, lecturing and private practice. He is consultant in psychiatry to the Surgeon General of the Army, consultant to the Department of the Navy and to the Veterans Administration.

Dr. Strecker is succeeded by Dr. KENNETH E. APPEL as chairman of the department of psychiatry. Dr. Appel has been associated with the medical school since 1945.

University of Pittsburgh

Dr. JOHN ROBERT MCGIBONY, medical director and chief of the division of medical and hospital resources, Public Health Service, has been named professor of hospital and medical administration at the graduate school of public health. He succeeds Dr. GLIDDEN L. BROOKS, who resigned to become medical director of United Cerebral Palsy.

State University of N. Y. (Brooklyn)

Thirty New York physiologists were entertained by the department

of physiology on May 20 at a meeting in Hoagland Laboratory. The meeting provided an opportunity to confer on problems of mutual interest and for demonstration of some research projects and methods. Dr. HANS SCHAEFER, professor of physiology at Heidelberg, discussed the theory of excitatory action of drugs and hormones on the muscular tissue of the cardiovascular system. Dr. Schaefer has been in this country for three months, visiting leading medical schools in the east and middle-west under the auspices of the Rockefeller Foundation.

State University of N. Y. (Syracuse)

Dr. WILLIAM A. BRUMFIELD JR., first deputy state commissioner of health, has been appointed professor and chairman of the department of public health and preventive medicine. He will assume his new duties September 1.

Dr. FRANCIS D. MOORE, Moseley Professor of Surgery and surgeon-in-chief of the Peter Bent Brigham Hospital, gave the second annual HERMAN G. WEISKOTTEN lecture at the alumni meeting May 28. Dr. Moore spoke on "The Growth of Our Knowledge of Metabolism and Biology in Surgery."

University of Tennessee

A postgraduate program for general practitioners, to be sponsored in cooperation with John Gaston Hospital and Le Bonheur Children's Hospital, has been announced. Four divisions of the college, including obstetrics and gynecology, pediatrics, surgery and medicine, will participate. Only one physician will be accepted at a time by a division. Further information may be obtained from the postgraduate department.

A portrait of Dr. F. TOM MITCHELL, chief of the division of pediatrics, was presented to the university June 11. Presentation was held at Le Bonheur Children's Hospital where Dr. Mitchell is chief-of-staff. Funds for the portrait were contributed by Memphis pediatricians.

When
is
Erythrocin*
an
antibiotic
of
choice?



A DRUG OF CHOICE against staphylococci — because of the high incidence of staphylococcic resistance to other antibiotics.

A DRUG OF CHOICE orally against streptococcal and pneumococcal infections, when patients are sensitive to other antibiotics or these cocci are resistant.

A DRUG OF CHOICE because it does not materially alter normal intestinal flora; gastrointestinal disturbances are rare; no serious side effects reported.

ADVANTAGEOUS because the special acid-resistant coating, developed by Abbott, and Abbott's built-in disintegrator, assure rapid dispersal and absorption in the upper intestinal tract.

Use ERYTHROCIN—the selective antibiotic—in pharyngitis, tonsillitis, scarlet fever, pneumonia, erysipelas, osteomyelitis, pyoderma and other indicated conditions.

Abbott

*Trade Mark for
ERYTHROMYCIN, ABBOTT
CRYSTALLINE

5-181



To reduce blood pressure and alleviate hypertensive symptoms

In discussing antihypertensive therapy, Grimson and co-workers conclude "... hexamethonium seems to be the best present medical approach toward blockade of the sympathetic nervous system."¹

With Methium (hexamethonium chloride), orally effective ganglion blocking makes it possible to:

1. reduce blood pressure to normal or near-normal levels
2. produce marked subjective improvement. Even when blood pressure is not lowered significantly, headaches, dizziness, palpitation and other complaints disappear in the majority of cases.

Also, "Papilledema and retinal damage usually regress. Cerebral edema and vomiting can be relieved. Pulmonary edema may be lessened or resolved and cardiac hypertrophy diminished."²

Methium is particularly indicated in severe hypertension. In malignant hypertension it is known to stay the rapid progress of the disease. Induction of lower blood pressure and increase of dosage should be gradual. Once maximal therapeutic benefit is obtained, dosage can be stabilized and therapy maintained indefinitely.

Methium is a potent drug and should be used with particular caution when complications exist—impaired renal function, coronary artery disease and existing or threatened cerebral vascular accidents. Complete instructions for the use of Methium are available and should be consulted prior to instituting Methium therapy.

Methium is supplied in both 125 mg. and 250 mg. scored tablets in bottles of 100 and 500.

1. Grimson, K. S.; Orgain, E. S.; Rowe, C. R., and Sieber, H. A.: J.A.M.A. 149:215 (May 17) 1952.
2. Paton, W. D. M., and Zaimis, E. J.: Pharm. Reviews 4:219 (Sept.) 1952.

Methium[®]

CHLORIDE

(BRAND OF HEXAMETHONIUM CHLORIDE)

WARNER-CHILCOTT
Laboratories NEW YORK

Audiovisual News

Report on Audiovisual Preview Circuits for Medical Colleges

ON JANUARY 5, 1953, ten medical colleges in the United States and Canada received a program of selected audiovisual materials for preview purposes. They were the first colleges on each of 10 preview circuits.

The programs were retained for one week, long enough to be seen by all interested, and then were forwarded to the succeeding colleges on the circuits. Every other week a new program was fed into each of the circuits for a 6- or a 10-week run, depending upon the number of colleges on each circuit. On May 25 the last schools on each circuit had seen all the programs and the first full trial run of the AV Preview Circuits for medical colleges was completed. A brief report will summarize the experiences and conclusions.

Purposes of the Circuits: Information sources on suitable medical audiovisual teaching materials are varied and often difficult to use with economy of time and effort. Likewise, the sources and conditions of availability of the materials themselves often are difficult to find. The procurement of materials for possible instructional purposes is a hazardous venture and, even with the benefits of full descriptive information, often turns out to be disappointing. Thus, the ordering of films from outside sources without previous preview is both expensive and time-consuming.

The prime purpose of the Preview Circuits was to circulate on an economical basis certain materials which appeared to be designed for medical school teaching applications so they might be previewed by the colleges with a view to determining their potential values in specific local teaching situations. The Preview Circuits thereby were to be an aid to medical

school faculties in selection of materials for instructional purposes. The faculties were provided with full information relating to preselected materials and they also were given the opportunity to see the materials.

Selection of Programs: The first programs for the circuits were selected on multiple criteria: (1) probable interest and usefulness to schools; (2) range of subject matter in order to bring many faculty departments into contact with the circuits; (3) range of AV media, in order to try out the practicability of the various media in the circuits operation, and (4) range of potential sources of AV materials, in order to test the effect of the circuits on suppliers.

Sources of Materials: Materials considered suitable for inclusion on the Preview Circuits were requested from the producers or distributors. There was a wide variety of sources including nonprofit sponsors such as the National Foundation for Infantile Paralysis ("Functional Anatomy of the Hand," a film); commercial sponsors such as Imperial Chemical Industries ("Life Cycle of the Malaria Parasite," a film); producers such as the University of Washington Instructional Materials Center ("Congenital Malformations of the Heart," two films); distributors such as Phase Films ("Meiosis," a film); and in one instance the author, a medical college faculty member, Dr. Hans Elias ("Histology and Dynamics of Capillaries and Arteries," a film-strip).

Administration and Finance: The Medical Audio-Visual Institute carried the responsibility and costs of general administration. Audiovisual coordinators in the colleges arranged for all actual previewing sessions and each college paid the transportation costs of forwarding the materials to the succeeding college on its circuit.

The sponsors, producers or distributors of the materials provided enough prints to supply the circuits.

Extent of Participation and Materials Used: Seventy schools of medicine in the United States and Canada participated in the circuits program in response to some 60 visitations and to a circular letter sent to all colleges. Each of these colleges received five programs including a total of nine films, four filmstrips, one slide set and one sample set of three dimensional kodachromes. These, of course, represent only a small portion of available materials which medical colleges may desire to preview.

Evaluation of Program: Each college used a standard appraisal form in evaluating each audiovisual unit previewed. The following table shows a compilation of "over-all appraisals," received at the time of this writing, given to the various items included on the circuits:

OVER-ALL APPRAISAL (Modal Numbers in Boldface)

Title	Poor	Fair	Good	Excellent
Functional Anatomy of the Hand.....	5	13	27	19
Autonomic Nervous System.....	5	17	33	10
African Trypanosomiasis.....	2	18	28	9
Life Cycle of the Malaria Parasite.....	1	2	20	36
Meiosis.....	3	5	19	16
Congenital Malformations of the Heart				
Reel I—Development of the Heart.....	—	—	10	24
Reel II—Acyanotic Congenital Heart Disease.....	—	1	11	10
A Cinematographic Study of the Function of the				
Mitral Valve in Situ.....	2	4	20	14
Subcutaneous Blood Flow in the Bat.....	1	7	32	9
A Stereoscopic Atlas of Human Anatomy.....	—	6	16	29
The Liver (Series).....	2	8	16	16
Histology & Dynamics of Capillaries and Arteries.....	—	6	23	7

As was expected, a wide range of ratings were given, depending on a variety of factors such as care in reading the literature, care in presentation and the variety of purposes and audiences for which the materials were being considered.

Evaluation of the Circuits Program: No formal attempt has been made by questionnaire or otherwise to evaluate the results of the Preview Circuits over and beyond the use of the appraisal forms submitted by the coordinators for each piece of material. However, unsolicited written comments and personal visitation to some

16 colleges have indicated that while there was dissatisfaction with certain of the materials, such as criticism of quality, there was general agreement on the value of the circuits. In addition to having fulfilled, the primary purpose of providing the colleges the opportunity to see materials and thus to aid them in selection, the following secondary results are evident:

1. Committee or group previews provided the setting for productive discussions on methods of better AV utilization within the colleges.

2. The concrete tasks required by the operation of the circuits on the part of the coordinators and the Institute staff opened valuable two-way channels for information and personal contact between the colleges and the staff.

3. The Institute gained important guidance in the wants and needs of the colleges as a basis for subsequent

selection of the circuit programs.

The distributors and producers were an important part of the Preview Circuits program. Any evaluation of the circuits must consider how effective they were in satisfying the purposes of the suppliers of the materials.

The goals of the distributor can be judged very simply in terms of prints sold and rentals procured as a result of the circuits. While insufficient time has elapsed to determine fully the promotional effects of the circuits, some indications are available. One distributor comments:

"We are getting considerable action in respect to the "Life Cycle of the Malaria Parasite" film and undoubtedly this is due to the circuit; and we are sure that the effort has been very well justified. Thank you again for your contribution toward the success of this large scale preview, and we hope that in the not too far distant future we may find other subjects of mutual interest."

The producers were interested both in the dissemination of their productions and the receipt of critical evaluations which might assist in future production. The circuits have provided the means by which producers could gain a wide coverage of anonymous reactions concerning the effectiveness of their products. Every unit included on the circuits elicited honest criticism which, while far from infallible, should provide some guidance for future production. One author-producer writes: "Thank you very much for the appraisal and comments . . . Needless to say I am very gratified with the results, and encouraged about the long and difficult job still ahead to complete the work."

Not all producers and/or distributors have welcomed the anonymous evaluations, nor have all revealed enthusiasm for the results which the circuits achieved in promoting their products. In some cases this may have been dependent on the severity of the criticism or the rejection of the product by faculty members. While the rejection of some materials by some colleges is *sine qua non* of the Preview Circuits idea, careful program selection in terms of predictable college acceptance is important both from the standpoint of the colleges as well as the producers and distributors.

Prospectus: A number of colleges have emphasized the value of the circuits. None have indicated dissatisfaction. Therefore, it must be assumed that the 70 colleges which participated this spring will continue. In addition, four colleges

which did not participate this spring for one reason or another have indicated a strong desire to be included when the circuits recommence in the fall.

Plans are being made to reopen the circuits in September and continue them through May 1954. Experience suggests minor changes: a revised appraisal form for the use of the colleges, inclusion of more motion pictures, reduction of slides and filmstrips, and almost complete exclusion of models and exhibits. Motion pictures are more readily adapted to circuits operation because of the general ease with which they may be handled by all colleges. In the selection of materials, emphasis will be given to short films designed for medical teaching purposes, and covering as many subject or specialty areas as available material will allow.

The inclusion of short films should satisfy a general desire for shorter films as teaching materials as well as provide experimental models for production of short films within the various colleges.

Summary: The Audio-Visual Preview Circuits for Medical Colleges served 70 colleges during the first five months of 1953. Problems of scheduling were experienced in a few isolated cases. While the individual programs themselves were received with a wide range of reaction—from enthusiasm to rejection—indications are that the plan serves a very excellent purpose.

The circuits have been rewarding for medical colleges, producers, sponsors, distributors and the Medical Audio-Visual Institute, as indicated in the following taken from a letter: "We have purchased several films seen on the MAVI circuit. The third chapter of the University of Washington film series, "Congenital Malformations of the Heart," has just reached us. We are purchasing it to add to Chapters I and II, seen originally on the MAVI circuit."—J. EDWIN FOSTER.

Announcing Publication of a New "Practice" Book

Jensen's **M**odern **C**oncepts
in **M**edicine

If you are using a "practice" book which covers disease organ by organ—or system by system—(what else could you be using, there being no other kind?)—you will find Jensen's approach to disease provocative and unique. For here the author shifts his emphasis entirely to what happens to the patient, rather than on what is seen in his condition. And he has come up with a very bracing way of searching for the solution to the fundamental, physiological problems.



Jensen's MODERN CONCEPTS IN MEDICINE might have borne many other titles we thought of during its preparation. It isn't easy to put into three or four words all the ideas he has covered—all the changes in medical thinking he describes. He has covered all the newer concepts of medicine in a very logical, physiological approach to disease. The manner in which he has done it might be referred to as "the hierarchy of adaptive processes."

He has even covered the new science of Cybernetics. His material is integrated entirely with the unitary approach—never considering

anything but the "whole person" in any disease or condition he describes. This is in conformance with the new concept of considering the person in relation to disease, change, stress—or even in relation to life and its problems. The author terms it "the effects of Western Civilization on man and his health."

The book takes you via biochemistry and the various transportation systems of the body to the bedside of the patient. It will be the most splendid indoctrination the student could have to the actual practice of medicine—for it throws new light to clear some of the confusion resulting from rapid change and dynamic advances.

By JULIUS JENSEN, Ph. D. (In Medicine) University of Minnesota, M.R.C.S. (England), L.R.C.P. (London). St. Louis, Missouri. 635 pages, illustrated. Price, \$11.50

Send inquiries and orders to 3207 Washington Blvd., St. Louis 3, Missouri



PUBLISHED BY—*The C. V. MOSBY Company*

Scientific Publications

SAINT LOUIS

SAN FRANCISCO

NEW YORK

Book Reviews

The Psychology and Psychotherapy of Otto Rank

Fay B. Karpf, Ph.D. The Philosophical Library, New York, 1953. 129 pp. with index. \$3.

The author of this "historical and comparative introduction to the theory and therapy of Otto Rank, his relation to Freud, Jung and Adler and to significant developments in the fields of analysis, psychotherapy, counseling, education and social work" was a student of Otto Rank and so is qualified to present his ideas.

The volume consists of a summary of Rank's more important theoretical and therapeutic views, as well as occasional biographical material. It is simply written, well documented and indexed and the references are most adequate. There are several interesting photographs of Rank and his colleagues.

Unfortunately, the author discusses technicalities that can be properly evaluated only by one who has read extensively in psychologic and psychiatric literature. Hence, it may be too confusing to be of much use to the medical student or nonpsychiatric physician. Furthermore, much biased information is presented; for example, the second chapter is devoted to an attack on psychoanalysis using the support of some critics whose obvious prejudices are well known. The book is designed more for the specialist or someone particularly interested in Rankian theory.

Comparative Conditioned Neuroses

Edward J. Kempf, consulting editor. *Annals of the New York Academy of Sciences*, Vol. 56, Art. 2, New York 1953. pp. 141-350. \$3.50.

The 15 reports presented here are based on a Conference on Comparative Conditioned Neuroses in Human and other Animals, held by the Section of Psychology of the New York Academy of Sciences in February 1952. The papers represent contributions by leading psychologists, physiologists and psychiatrists currently engaged in research on learning theory, conditioning and neurophysiological correlations as these apply to the understanding of personality disorders in man.

The material is succinctly presented and adequate bibliographic references, charts, tables and photographs enhance the clarity of the text. Methods, controls and experimental procedures are described throughout in sufficient detail to permit thorough understanding and evaluation of the results and theories presented. Unfortunately none of the discussions of these papers is included and no final summary of the conference is given.

It would be impossible to list or discuss all the articles in this review. It can be said, however, that multidisciplinary approaches raise and attempt to answer such questions as the importance of the inheritance of basic constitutional behavioral variations in animals, the neuroendocrine components in the physiological response to stress, the dynamics of experimental neuroses, factors modifying conditioned reactions and their relationship to the autonomic nervous system, physiologic and psychologic alterations in chronic fear and anxiety, neurosis as a possible disorder of learning and the effects of vigilance and conditioned reactions in neuroses and psychoses.

The conclusions reached by Dr. Kempf in his paper on neuroses as conflicting reactions seem to summarize the significance of the conference and so are presented here.

"Obviously, the general science of human behavior must develop a special science of the culture of socially adaptable, holistic attitudes with insight for individuals in relation to their social groups. We as yet have no such science.

"Not only does psychiatry need it most urgently for the treatment of neuroses and psychoses; but all religious, educational, military, governmental, penal and other social disciplines need it if they would cultivate a democratic system of civil, equalitarian rights and attitudes, out of the primitive culture of gangsterism with unilateral graded rights based on brutal domination of the weak.

"A new theory of human and other animal behavior, as holistic, equilibrating, electrical reaction systems, built up in a series of pyramiding levels—

atomic, molecular, cellular, organismic, psychic and bisexual social—is presented. It provides a new comprehension of the behavior of man in his more or less closed social situations, that explains the production of neurotic and normal behavior consistently with his evolution from lower forms of animal life."

**The Yearbook of Psychoanalysis,
Vol. VIII, 1952**

Sander Lorand, M. D., managing editor.
International Universities Press, Inc., New
York, 1953. 383 pp. \$7.50.

A selection of outstanding papers covering a wide area in the field of psychoanalysis is presented. Included are theoretical and clinical material, previously untranslated Freud and a discussion of the relation of psychoanalytic concepts to other scientific fields.

The book should be a standard part of all psychoanalytic libraries and will be valuable reading for those who wish to keep in touch with the most important thinking in this area.

**General Education in School
and College**

A Committee Report. Harvard University
Press, Cambridge, Mass., 1952. 142 pp. \$2.

This report contains a study of the relationship between the last two years of secondary school and the first two years of college, conducted by faculty members from Andover, Exeter, Lawrenceville, Harvard, Princeton and Yale. The survey was financed by the Fund for the Advancement of Education of the Ford Foundation.

Since a large number of students go from Andover, Exeter and Lawrenceville to Harvard, Princeton and Yale, much information about the transition from school to college was available from this group. Approximately a year was spent on the following activities:

(1) A study was made of the academic records from the 11th grade through college of students who went from the three secondary schools to the colleges mentioned. Some 344 records were studied. (2) A survey was made of 10 different subjects by experienced teachers to find out how they are taught in the upper years of the secondary schools and the first two years of the colleges. (3) A 20-page questionnaire of the essay type was sent to 58 selected students from the group of 344. (4) Panel discussions were held with guest

consultants on various aspects of the curriculum.

The survey revealed much duplication between school and college courses. Important gaps in the curriculum were discovered, as well as a lack of the kind of education which will arouse the student's interest and initiative.

A basic program for the four-year period is suggested, along with sample individual programs designed for students with special interests. The plan is felt to be of particular value to superior students, for whom a seven-year program of acceleration is recommended.

**A Short Practice of Surgery,
9th edition**

Hamilton Bailey, F.R.C.S. (Eng.), F.A.C.S.,
F.I.C.S., F.R.S.E., emeritus surgeon, Royal
Northern Hospital, London; R. J. McNeill
Love, M.S. (Lond.), F.R.C.S. (Eng.),
F.A.C.S., F.I.C.S., surgeon, Royal Northern,
Midmay Mission and Metropolitan Hos-
pitals. The Williams & Wilkins Company,
Baltimore, 1953. 1234 illustrations. 1254
pp. with index. \$12.50.

The format of this book is somewhat different than that found usually in American textbooks. Its physical management, therefore, seems somewhat difficult to one unaccustomed to so bulky a volume. The illustrations are excellent, many appearing in color and almost invariably depicting unusually well the condition being presented.

The material is well organized and divided so as to make the important aspects obvious, as is usual in Canadian and British textbooks. The author writes exceedingly well and occasionally displays some well chosen humor. All fields of surgery including urology and orthopedics are covered, the latter rather superficially but sufficiently well to meet the needs of the undergraduate student. This text can be recommended for undergraduate use in institutions which follow the older didactic approach.

The Normal Child

Some Problems of the First Three Years
and Their Treatment. Ronald S. Illing-
worth, M.D. (Leeds), F.R.C.P. (Lond.),
D.P.H., D.C.H., professor of child health,
the University of Sheffield. Little, Brown
and Company, Boston, 1953. Illustrated.
342 pp. with index. \$6.

The mass of material quite legitimately falling under the heading of "The Normal Child" gives this book both its *raison d'être* and a somewhat controversial nature. Described are the normal variations in the normal child during his first three years, including feeding, physical and mental development and

behavior, as well as certain aspects of preventive pediatrics in all areas. In his preface the author mentions the obvious difficulty faced in deciding what is normal and what is abnormal.

A full and practical discussion of the many ramifications of breast feeding is the dominant subject of the section on feeding. The discussion of developmental aspects is based largely on Gesell's works and on the experience of the author in working with Dr. Gesell. A resume of this sort, which presents the material as it applies in the everyday care given by the pediatrician or general practitioner is valuable. A tremendous amount of down-to-earth information, controversial at times as it must necessarily be, is included in the section on behavior, with a useful introductory chapter on the relevant features of the physiological development of the child.

Broad in scope and very readable, this book is a good jumping-off place for the student or practitioner. References are well selected.

A Course in Practical Biochemistry, 6th edition

Cameron and White text revised by **Frank D. White, A.R.T.C., Ph.D. (Edin.), F.R.I.C.**, professor of biochemistry, faculty of medicine, University of Manitoba; **George E. Delory, M.Sc., Ph.D. (Lond.)**, associate professor of biochemistry, faculty of medicine, University of Manitoba. **J. & A. Churchill Ltd., London, 1952. Illustrated. 222 pp. with index. \$2.45.**

The sixth edition of the White and Delory laboratory manual (formerly by Cameron and White) is similar in approach to previous editions. Designed for medical students, the subject matter has been thoroughly revised and largely rewritten. The manual is devoted to the more common qualitative and quantitative biochemical procedures usually performed on materials of physiological importance. Also included is a chapter devoted to the application of biochemical procedures, to tests of liver, kidney and pancreatic function. According to the authors, the laboratory experiments included are sufficient for from 169 to 187 or more hours of laboratory work.

Although "A Course in Practical Biochemistry" is clearly and concisely written, it is neither notably different nor superior to several other published laboratory manuals available, some of which are broader in scope. Lacking, or few in number, are experiments concerning hormones, nutrition, vitamins

and physiological oxidation. Except for gastric analysis and experiments on digestion, determination of the basal metabolic rate, tests for liver, kidney, pancreatic function and blood coagulation, there are no experiments included in the book which apply the procedures given to a study of metabolism and chemical physiology of the living animal. Teachers who prefer to confine their laboratory teaching to the limited selection of experiments included in this laboratory manual probably will find it useful in their teaching programs.

Medical Public Relations

Edgar A. Schuler, Ph.D.; Robert J. Mowitz, Ph.D.; Albert J. Mayer, Ph.D., all of the faculty of the college of liberal arts, Wayne University. Detroit, Mich., 1952. 228 pp.

The book contains a study of the public relations program of the Academy of Medicine of Toledo and Lucas County, Ohio, as conducted in 1951 by Wayne University with a grant from the Health Information Foundation. Purpose of the study was to analyze the program so that knowledge gained could be used by other medical societies for improving community health through a constructive public relations program.

Five areas around which the Toledo group centers its public service program are discussed in detail. They include: a 24-hour telephone switchboard service to locate emergency medical care, a plan to help people find a satisfactory family doctor, preparation and distribution of a pamphlet on home care of the sick, a speakers' bureau, a professional relations committee to enforce the moral and economic ethics of good medicine.

The study took less than a year and included such activities as a sample questioning of 600 households to determine the effectiveness of the program, a sampling of 50 physicians, a sampling of 50 community leaders, investigation of some recent complaints arriving at the academy and a study of the switchboard service and the academy public relations program.

Questionnaires used are given in full, as are statistical tables and several of the newspaper advertisements placed by the academy to make its switchboard service known.

A valuable book for anyone interested in the improvement of doctor-patient relationships and community health.

The Personnel Exchange

Faculty Vacancies

• A one-year salaried training position will be available in the consultation clinic for EPILEPSY, University of Illinois College of Medicine, beginning July 1, 1953. Address application or requests for further information to: Dr. Frederic A. Gibbs, 912 S. Wood St., Chicago 12.

• **PHYSIOLOGIST, Ph.D. or M.D.** Desired for permanent position in physiology department. Preference given to those with interest in cardiovascular or neurophysiology. Teaching program of 16 weeks duration; remainder of year available for research. Further information may be obtained from: Dr. Harold C. Wiggers, professor of physiology of the College of Medicine, Albany Medical College, Union University, Albany, N. Y.

• The department of **MICROBIOLOGY and IMMUNOLOGY** of a medical school in the midwest is scheduled to move into new and enlarged quarters toward the end of 1953. The staff is to be increased by two full-time members. Those interested and experienced in teaching medical students are requested to give information concerning their personal history and qualifications and the desired rank and salary. Address: V-7.

• The departments of **BIOLOGY, ANATOMY, BIOCHEMISTRY and PHARMACOLOGY** have vacancies for four professors at the Royal College of Medicine in Baghdad. The salaries are open. For further information address requests directly to: Glenn S. Usher, M.D., chief, Health and Sanitation Division, TCA/Iraq, c/o American Embassy, Baghdad, Iraq.

• Applications are invited for positions of assistant or associate professor of **MICROANATOMY and GROSS ANATOMY**, duties to commence September 1, 1953. Further information may be obtained from Dr. R. L. deC. H. Saunders, anatomy department, Dalhousie University, Halifax, N. S., Can.

• Assistant resident in **CLINICAL PATHOLOGY**. Approved for entire training by College of American Pathologists; 1,000-bed teaching hospital; modern equipment; laboratory performs over 1,200 tests per day; research laboratories and facilities available; department

has own teaching and research programs. Complete maintenance, including room, board, laundry and medical care, plus stipend of \$900 per year. Contact director, department of clinical pathology and hospital laboratories, Medical College of Virginia, Richmond 19.

• Opportunity for professorships in departments of **ANATOMY, PHYSIOLOGY, and PHARMACOLOGY** in well established medical school. Must be mature and have experience in, or capacity for departmental administration. Salary commensurate with experience and ability. Address: V-9.

• **PSYCHIATRIST:** Desired for full-time position as university psychiatrist for student health services and as consultant to outpatient mental hygiene clinic and marriage counseling clinic. Prefer diplomate of American Board of Psychiatry or eligible, with training and experience in dynamic psychotherapy. Some teaching required. Salary open. Address: V-10.

• **IMMUNOCHEMIST-IMMUNOLOGIST:** Department of bacteriology, southern medical school, invites applications for position of instructor or assistant professor. Teaching 16 weeks; remainder of year for research. Include curriculum vitae and bibliography of publications in reply. Address: V-11.

Personnel Available

• **PHYSIOLOGIST — Ph.D.**: age 36. Active researcher and teacher at university level, desires teaching-research position in medical school. Fine scholastic record, publications, National Research Council fellow, five years' teaching experience human, general physiology. Position with permanence desired, but will consider appointment permitting working for M.D. degree. Available after June 1953. Address: A-22.

• **SURGEON:** Interested in teaching and research; Certified by the American Board of Surgery; Fellow, American College of Surgeons; two years teaching experience in clinical surgery; married; category 4 service U.S. Navy. Full-time work preferred. Address: A-32.

To aid in solution of the problem of faculty vacancies, MEDICAL EDUCATION will list persons and positions available, as a free service. The school, department or person may have the option of being identified in these columns or of being assigned a key number for each position listed. Mail addressed to key numbers will be forwarded to the person or department listing the request.

Information for these columns should reach the Journal office, 185 N. Wabash Ave., Chicago 1, not later than the 10th of the month preceding publication.

• **Surgeon:** 32, interested in career in academic surgery. Anticipates completion of American Board of Surgery certification March 1953; application accepted for fellowship in the American College of Surgeons for 1953. Currently holds staff appointment in department of surgery of a medical school. Wife and two children. Has training in basic research and anxious for opportunities in this direction. Full-time position preferred. Address: A-33.

• **Anatomist:** Ph.D., assistant professor, male, married. Four years teaching experience in medical school gross anatomy. Research and interest in neuroanatomy. Available August 1953. Address: A-34.

• **Neuroanatomist:** man, 43, married, Ph.D., member American Association of Anatomists. Experience: seven years teaching neuroanatomy, four years teaching gross anatomy; basic neurological research; administration; membership on several medical school administrative committees; original training under highly distinguished neuroanatomists. Publications. Member of scientific and scholastic societies. Noteworthy references. Experience includes reorganization of premedical program in large college with salutary results. Desires medical school position where interests in teaching, research and administration can be fulfilled. Available July 1953. Address: A-36.

• **Anatomist:** Ph.D., man, 40. Desires teaching position in anatomy (gross or microscopic). Teaching experience in histology, embryology and gross anatomy in dental and medical schools. Publications. Excellent references. Now employed but may be available on short notice. Address: A-37.

• **Bacteriologist; Parasitologist; Public Health Instructor:** Ph.D., man. Desires teaching position in bacteriology, parasitology or preventive medicine. Teaching experience in these subjects in liberal arts and professional schools. Now employed but may be available on short notice. Publications. Excellent references. Address: A-38.

• **Internist:** 35 years. Certified. Would like full-time teaching position, associate professor of medicine or higher in medical school where there is an opportunity for organized research. Interested in metabolism and isotope research. Has been connected with teaching university since getting out of service. Associate in medicine 1951. Numerous publications. Address: A-39.

• **Ophthalmologist:** Age 33, married, priority 4, certified, advanced degree in ophthalmology. Engaged now in medical school teaching, research and private practice. Publications include article, monograph and review. Trained in major American institutions. Desires full-time opportunity to combine teaching, research and clinical work. Address: A-40.

• **Biochemist:** Ph.D., age 26, married. Four years' research on the biochemistry of human arterial smooth muscle, contraction and tonus mechanisms in relation to hypertension and arteriosclerosis. Desires opportunity to continue biochemical research on the arterial wall under cardiovascular investigator, with possibility of study toward M.D. degree. Available October 1953 or June 1954. Address: A-41.

• **Biochemist:** Man, 32, family, Protestant. B.S. chemistry; M.S., Ph.D., biochemistry.

Minors: physiology, microbiology, organic chemistry. Societies. Publications; book in progress. 3 years experience undergraduate, 4 years graduate assistant, 1 year industrial chemist, 3 years army medical technologist, 1 year cancer research. Currently 2 years assistant professor biochemistry in medical school. Research interests: carbohydrates, nucleic acids, analytical biochemistry, clinical chemistry. Desires change for professional, financial advancement. Available 2-3 months after job agreement is concluded. Address: A-42.

• **Biochemist or Physiologist:** Ph.D., age 31. Active researcher and teacher at university medical school for five years. Fine scholastic record, public health senior research fellow, many publications. Interested in position allowing work for M.D. degree. Address: A-43.

• **Anatomist:** 32, married, children. National Cancer Institute fellow (1 year); experience in all branches of anatomy. Publications on request. Interested in research as well as teaching. Excellent references. Available after July 1, 1953. Address: A-44.

• **Biochemist-Physiologist:** Man, 30, married, Ph.D. Now assistant professor at medical college. Enthusiastic teacher with several years of research experience. Desires academic position at medical, dental or pharmacy school or liberal arts college where good teaching is considered important. Interested in graduate training program and fundamental research, if available. Administrative duties are very welcome. Publications. Location immaterial. Rank and salary open. Address: A-47.

• **Teaching Fellowship — Otolaryngology:** special interest in problems of tumors in region of head and neck, particularly those related to cancer of mouth, larynx and pharynx. Man, single, 37, M.D. (surgeon) University of Cordoba. Head of clinic and assistant chief, department of otolaryngology, Hospital Espanol, Cordoba, 3 years; intern and resident, U.S., 1948-1951. Member scientific societies. Excellent references. Argentine citizen; good command of English. Address: A-49.

• **Teaching Fellowship — Gynecology:** Man, 41, married, M.D., University of Cordoba. Supervision of gynecological patients 1939 to present, 2 years teaching in medical school and hospital. Member scientific societies. Publications. Argentine citizen; good command of English. Address: A-50.

• **Young Surgeon** — Certified general and thoracic boards, University trained. Major interest thoracic and cardiac surgery. Experienced in applied cardio-pulmonary physiology. Some publications. References. Wishes full-time teaching appointment. Address: A-51.

• **Pharmacologist—Administrator:** Man, 31 married. Ph. D. Desires academic position, preferably with teaching duties. Four years industrial experience, and five years academic experience. Interest in toxicology and neuropharmacology, and graduate student training. Highest references, publications. Address: A-52.

• **Radiobiologist - Histologist - Zoologist:** Man, 49, married, Sc.D. Experience mainly in radiobiology and histology. Prefers position in research institution or teaching and research in histology or zoology department with radiobiological research opportunities, or research appointment in department of

roentgenology or radiobiology. Address: A-53.

• **PARASITOLOGIST:** D.Sc., man. Internationally known—widely travelled. Guggenheim fellow. Effective teacher on undergraduate level in zoology, in medical school and postgraduate clinical level. Numerous research papers and monographs in taxonomy of parasites, surveys, chemotherapy and toxicology. Gets on well with colleagues. Desires position in fall. Salary secondary to time for research. Liberal arts college will be considered. Address: A-54.

• **ADMINISTRATOR-EDUCATOR:** Man, 38; B.S., M.A., Ed.D; fellow, national science-medical societies; 17 years experience administrator national public health-medical organizations; university professional school teaching; 8 years intensive experience medical school organization management including affiliation, curriculum, fellowship and research programs, fund raising, physical development, purchasing, student selection; author six books, numerous papers. Seeks top-level administrative post medical school, foundation, east. Address: A-55.

• Position desired in medical school or university hospital by woman with M.S. in bacteriology. Three years experience teaching bacteriology, serology, parasitology and clinical microscopy to medical students and medical laboratory technicians. Excellent experience in writing and statistical interpretations in medical fields. Formerly in charge of university hospital bacteriology and serology department. Address: A-56.

• **INTERNIST:** 35. Certified. Desires full-time academic appointment with research. Currently assistant professor of medicine, director of basic research laboratory (biochemistry and physiology), supported by several grant foundations. Active in clinical teaching. Research and clinical experience at several leading institutions, including fellowship abroad. Priority IV. More than 40 publications. Address: A-57.

• **RADIOLOGIST:** 37. Assistant professor. Male. Married. 4 years teaching experience. Available on short notice for full-time academic position. Address: A-58.

• **BIOCHEMIST:** Ph.D., 1953. M.S. Analytical chemistry. Desires academic and/or research position. Strong medical science background. Four years diversified teaching experience. Research experience in enzymes, trace metals and histochemistry. Age 32, family, veteran. Sigma XI, publications. East preferred. Address: A-59.

• **M.D., Ph.D.**—40 years of age, married. Interested in teaching as associate professor or higher of PREVENTIVE MEDICINE and PUBLIC HEALTH in medical or public health school; prefer associated opportunities for field study in public health. 15 years experience include general public health administration, indus-

trial hygiene, epidemiology, immunology, basic and applied research, and some undergraduate and postgraduate teaching. Publications. Excellent references. Northeastern states preferred. Available on short notice. Address: A-60.

• A position in PREVENTIVE MEDICINE and PUBLIC HEALTH with administrative responsibility desired. Age 45, married; two children. 13 years extensive experience in administrative medicine, including the teaching of public health and preventive medicine. Broad background in multiple areas of medical and hospital economics. References. Fellow, American Public Health Association; diplomate, American Board of Preventive Medicine and Public Health. Address: A-61

• **CHIEF X-RAY TECHNICIAN:** White, male, 45 years. 20 years experience. 12 as chief of busy 20-employee department. Capable of assuming complete supervisory responsibility, teaching and general administration duties. Location desired outside New York area. Address: A-62

• **PHYSIOLOGIST:** Ph.D. Man, 34. Desires research position. Special training in endocrinology, undergraduate major in veterinary medicine. Experiences in research. Address: A-63

• **PATHOLOGIST:** M.D. under 40, diplomate. Professor and chairman of department of pathology and chief of diagnostic services; distinguished academic career, varied experience, numerous publications; seeks post as full or associate professor with suitable responsibility and hospital laboratory directorship in progressive medical school. Available June 1954. Own department can be inspected by interested body. Reasons for change: overwork and poor financial return. Address: A-64

• **BIOCHEMIST:** Ph.D., 1952. Plasma protein fractionation, enzymes, blood coagulation, fibrinogen. Six publications on these topics. Electrophoresis. Five years laboratory teaching experience in medical and dental biochemistry food analysis, blood chemistry. Seeking teaching position with or without facilities for research. Address: A-65

CALIFORNIA ROCKY MOUNTAIN STATES PACIFIC COAST

Many openings, general,
Industrial and Specialties.

CONTINENTAL MEDICAL BUREAU, Agency
510 West 4th Street, Los Angeles 14
(Helen Buchan, Director)

Index to Advertisers

Abbott Laboratories.....	65
Appleton-Century-Crofts, Inc.	3
Bausch & Lomb.....	8
Continental Medical Bureau.....	76
J. B. Lippincott Company.....	Back cover
McGraw-Hill Book Co., Inc.....	Inside front cover

C. V. Mosby.....	70
Parke, Davis & Company.....	Opposite p. 4
Chas. Pfizer & Co.....	Inside back cover
W. B. Saunders Co.....	Front cover, 1
Warner-Chilcott Laboratories.....	66
Winthrop-Stearns.....	7

